

## SEQUENCE LISTING

<110> Sun, Yongming  
 Recipon, Herve  
 Salceda, Susana  
 Liu, Chenghua  
 Turner, Leah

<120> Compositions and Methods Relating to Breast Specific  
 Genes and Proteins

<130> DEX-0247

<140>

<141>

<150> 60/243,805

<151> 2000-10-27

<160> 266

<170> PatentIn Ver. 2.1

<210> 1

<211> 291

<212> DNA

<213> Homo sapiens

<400> 1

```
gctcgagtta aggttcctgt tttcacacag aatgtctagc ctcaattcca ccagctccag 60
gtaataattc catgacttca gaattgttcc acattaatgg ttctctttgt caataaaatt 120
tcagagggtca cgctaataaa agtcactagc catggaaatg ttataaaata gcaaaacatg 180
tattggatta acttagcttt tattcaccaa atagtggagta atagttcatt tctctcttca 240
caaaccaatg aagccaaacc aaacaaatgt accttggtac ttagatcaaa g 291
```

<210> 2

<211> 157

<212> DNA

<213> Homo sapiens

<400> 2

```
actgggcctg gctgccacag ctactaatat cttaattgtt agtaatacct tattgggaat 60
aattaggcag aaatggagag ggtgagttta gattaatcag tatgtgtgaa cttgttttaa 120
agtttctgga ggctgaggtg agaggatcgc ttaagtc 157
```

<210> 3

<211> 775  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> unsure  
 <222> (507) .. (540)  
 <223> a, c, g or t

<400> 3  
 gcacgatcag aagagaggtt aagagtgcgg tattctttaa ctcctcctgg tttcttgcta 60  
 tagtctctag tagatcgctc ttgcactatt atctgtcact tcatatgggg tttgctagga 120  
 tcgctcagct ggatccggac cggttaacac cgggacgtcc ctcgtcgacg ccctcgcgac 180  
 gtggtttaag taagccctaa cactcaagtt tttatcaacc atggccggggc tctgagggaaa 240  
 tagccagatt accctgctca gaggggtggca gtggcgggag gtactacagt ggactggtga 300  
 aagtgtcctg ccaggccttc tagggagttc ccctacacat catttttctc tttttaatgc 360  
 agggcgagga ggctcgagcc agattaccct gaatcaaggg tggcagtggtc ttgtgttacg 420  
 caagttcact gttggagggtg gaagctgagt ggcctgtaat ggccctaagct cacctgccac 480  
 tgcttcttgt gagtttcaaa gacactnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 540  
 caaccatggc ctgtagagga ggcactatag atattacaat gctcaagggtg tggccttggc 600  
 tgggtggttaag caagtgccgt ggtgaacttg tcctgccatg gcttctatgg gtgtccccc 660  
 acacatcttt ttaaatTTTT aatgccatgc taggaggctc gcacagatta ccttttatcg 720  
 cggatggcag tggcagtggt gggaggtaag caagtgcctt ggggaaagtg gcagc 775

<210> 4  
 <211> 267  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> unsure  
 <222> (249)  
 <223> a, c, g or t

<400> 4  
 ctctctggtc tcgagtcacc aggaccagat cgaggatgcg gccgaccccc tgccccgatg 60  
 ggaaagcgaa gtctccacct cgtgattggg tctctgctgt cagagagctt cacgagcttg 120  
 aggggaaaca gacagagagg tctgggcatt gggcagtttc ccgcctccca gccccgcgca 180  
 ctgaacagac tgtgaccaga actgcgaaca aagcgcggag ggaagctctt aaaggaggcc 240  
 aaagcggcgg ggcgctgtng ctcacac 267

<210> 5  
 <211> 690  
 <212> DNA  
 <213> Homo sapiens

```

<400> 5
gggattgggt gctatgtccc acgacattag ctgggattct aagacctttg ctcagctgct 60
gcggccacca ctgacacgcc ctctgctcct caaatacggg gaacagttca gtgttcctgc 120
ctgaggatct ctgcaatgcc gttccctctg cctgggactc ttccttcaca tccgcttccc 180
cagcttcaag ctccgcatca cctcctcaga gaggccctcc aagccctggg gccccgggcaa 240
cccctgtctac ccgtttttggc ctctgttttt tttttttttt ttcaaaggac gttatgttgc 300
ccaggctaga gtgcaacggg ccgatcacgg attactgcag ctccaactc ctggcttcaa 360
gcgctccttc tgccctcggc tcccagtag ctaggcttac aggctggggg tacagggtgt 420
agccacagcg ccggcccgct ttggcctcct ttaagagctt ccctccgcgc tttgttcgca 480
gttctgtgtca cagtctgttc agtgccggg gctggggaggc gggaaactgc ccaatgccca 540
gacctctctg tctgtttccc ctcaagctcg tgaagccctc tgacagcaga gacccaatca 600
cgagggtggg acttcgcttt ccacatcggg caggggggtcg gccgcatact cgatctggtc 660
ctggtgactc gagaccagag aggagcgcac

```

```

<210> 6
<211> 639
<212> DNA
<213> Homo sapiens

```

```

<400> 6
cacttttgat ettccttca gcgacctga agcctttgat atatccccct tttaactcta 60
ccaccttcac ccctctgttc attctgccag gcttttcatt tcccacttca acctctcagc 120
tcccaacagt cacttgaact atagacccct tggcctccat tgggggctct ccttaagaga 180
ctgaggggac cctgagggat ccccaaaagc aatgattaga ggctgaaaac agaaaaaaa 240
ctttggaaac agactggatg ttttgtacac tcagagaatc cgacaacagc tgctccagct 300
gacacgtatc cagctactgg tcctgctgat gatgaagccc ctgatgctga aacctgtct 360
gctgcaacca ctgcaaccac tgctgctcct accactgcaa ccaccgctgc tttaccact 420
gctcgtaaa acattccagt tttacccaaa tgggttgggg atctcccgaa tggtagagt 480
tgtccctgag atggaatcag cttaggtctt ctgcaattgg tcacaactat tcatgcttcc 540
tgtgatttca tccaaactact taccttgctc acgatatccc ctttatctct aatcagttta 600
ttttctttca aataaaaaat aactatgagc aacataaaa

```

```

<210> 7
<211> 288
<212> DNA
<213> Homo sapiens

```

```

<400> 7
cttctcttag gcttgaagc atttttgtct gtgctccctg atcttcagggt caccaccatg 60
aagttcttag cagtcttgtt actcttggga gtttccatct ttctggtctc tgcccagaa 120
ccgacaacag ctgtccagc tgacacgtat ccagctactg gtctgctgca tgatgaagcc 180
cctgatgctg aaacctcagc tgctgcaacc actgcaacca ctgctgctcc taccactgca 240
accaccgctg cttctaccac tgctcgtaag acattccagt tttaacct

```

```

<210> 8

```

<211> 496  
 <212> DNA  
 <213> Homo sapiens

<400> 8  
 agcgccttgc cttctcttag gctttgaagc atttttgtct gtgctccctg atcttcaggc 60  
 caccaccatc aagtctcttag cagtccctgg actcttggga gtttccatct ttctgggtctc 120  
 tgcccagaat ccgacaacag ctgctccagc tgacacgtat ccagctactg gtccctgtga 180  
 tgatgaagcc cctgatgctg aaaccactgc tgctgcaacc actgcaacca ctgctgctcc 240  
 taccactgca accaccgctg cttctaccac tgctcgtaaa gacattccag ttttacccaa 300  
 atgggttggg gatctcccgga atggtagagt gtgtccctga gatggaatca gcttgagtct 360  
 tctgcaattg gtcacaacta ttcatgcttc ctgtgatttc atccaactac ttaccttgcc 420  
 tacgatatcc cctttatctc taatcagttt atttcttttc aaataaaaaa taactatgag 480  
 caacataaaa aaaaaa 496

<210> 9  
 <211> 193  
 <212> DNA  
 <213> Homo sapiens

<400> 9  
 actgacaatt ctctgaattg aaatcatttg ttcaacatat actgaatccc tatgggtctcc 60  
 tagggaactg agtgaatgag tgttcacgct gatgaagaac tcacactcta atggaacgac 120  
 agataaactc aaacaatttg caaagtgcac caattagatt tgccttttgg gaccaggcgtc 180  
 ggtggctcac gcc 193

<210> 10  
 <211> 838  
 <212> DNA  
 <213> Homo sapiens

<400> 10  
 tttttttttt atagagacat ggtttcactg tcactcaggc tgaagtgcag tggcatagtc 60  
 atagttcata gtccaactcc tgggctccag caatcctcca cctcagtcctc tttttttgtt 120  
 tgtttttttt gagacggagt ctccctctgt tgcccaggct ggagtgcagt ggcgcgatct 180  
 cggctccctg caacctccgc ctccctgggt caaacggttc tcttgctca gcctcctgag 240  
 tggctgggag tacaggcagg gactacaatg ctcagctatt ttttgtattt ttagtagaga 300  
 cggggtttca ctacgttggc caggctggtc tcaaaactcc gacctgtgta tccgcctgcc 360  
 tcggcctccc aatgtgctgg gattacaggc gtgagccacc acgcctggcc caaaaggcaa 420  
 atctaattct qtcactttgc aaattgtttg agtttatctg tcgttccatt agagtgtgag 480  
 ttcttcatac gcgtgaacac tcattcactc agttgcctag gagaccatag ggattcagta 540  
 tatgttgaac aaatgatctc aattcagaga attgtcagtg aagtgggtgc tagcacctgt 600  
 aatcccagct actctggagt ctgaggtggg agaactcact gagccaggag ttcaagacca 660  
 acctggacaa catagaaaga ctctgccttt aaaaaaaatg taaaaaaatt ggtcgtatgt 720  
 ggtagcatgt gcctgtagtc ccagcttctc ggggtggccaa ggtgggaaga tagcttgagc 780  
 acaggatttc gaagtacag tgagccatga ttgcaccatg gcacatcagt ccttgtgc 838

<210> 11  
 <211> 781  
 <212> DNA  
 <213> Homo sapiens

<400> 11  
 ttactctact gtatgccagt taaaagccca gtgtgtttca ttcataatta tgcaaagtgc 60  
 tgacattaat aaaggtctat ctgtacattt tatttaatat tggagaagaaa taaaggagtt 120  
 taagacatat aaccacagcc acaatagtaa aacctaaacc ttataaata aaaagcagaa 180  
 ctattttatg gtgctcttag aaacagtggt ttggtaaaat ttgaaatga gatgttttgc 240  
 tattttcatt ttattatttt tctacttaat atcctctggc tgccctattc caacagctct 300  
 atggtttctt ggctgagtct tctcaatatt cttaccctct tttgaatttc ttcaacatca 360  
 gaaagactcc catttttttc ctggatattt ggagcaatcc aattttattg aataaattaa 420  
 cacttttaaa accaactctc ccatgtttta ttgctcatag catagtcca aataattcca 480  
 ggtaaatagc atttcaggca ataagaagtg caaaatcaga cctcatagat aaccaccct 540  
 ctatccatc cttaaggcca gcgttgtag cattttaaat attatttgta tattttttaa 600  
 gttactagta atatggcatc atttagtgat tcttttggga attttttttt gagttgcatg 660  
 tttttatcca ttggaggtt aaattacata tgtgtgggtt tttttaaatg gagcttttct 720  
 tactatatgt tccattcaaa ataaaaaatt aaaatcttgc cataagaata aatttgattt 780  
 t 781

<210> 12  
 <211> 888  
 <212> DNA  
 <213> Homo sapiens

<400> 12  
 ttactctact gtatgccagt taaaagccca gtgtgtttca ttcataatta tgcaaagtgc 60  
 tgacattaat aaaggtctat ctgtacattt tatttaatat tggagaagaaa taaaggagtt 120  
 taagacatat aaccacagcc acaatagtaa aacctaaacc ttataaata aaaagcagaa 180  
 ctattttatg gtgctcttag aaacagtggt ttggtaaaat ttgaaatga gatgttttgc 240  
 tattttcatt ttattatttt tctacttaat atcctctggc tgccctattc caacagctct 300  
 atggtttctt ggctgagtct tctcaatatt cttaccctct tttgaatttc ttcaacatca 360  
 gaaagactcc catttttttc ctggatattt ggagcaatcc aattttattg aataaattaa 420  
 cacttttaaa accaactctc ccatgtttta ttgctcatag catagtcca aataattcca 480  
 ggtaaatagc atttcaggca ataagaagtg caaaatcaga cctcatagat aaccaccct 540  
 ctatccatc cttaaggcca gcgttgtag cattttaaat attatttgta tattttttaa 600  
 gttactagta atatggcatc atttagtgat tcttttggga attttttttt gagttgcatg 660  
 tttttatcca ttggaggtt aaattacata tgtgtgggtt tttttaaatg gagcttttct 720  
 tactatatgt tccattcaaa ataaaaaatt aaaatcttgc cataagaata aatttgattt 780  
 tggccaggca cgttggtctc cgctgttct cccagcactt tgggaggccg tggcagacgg 840  
 aaagattgag accattctggt ctaacacgat gaaacccgt ccctacta 888

<210> 13

<211> 512  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> unsure  
 <222> (345)  
 <223> a, c, g or t

<400> 13  
 agcatttgta aaggttcaat ttgattagtc aggttcattt atttattttc cttgttatca 60  
 ttatatgata taaaatacaa gactagtttt tcctatagtt taatgtttct gtggctctct 120  
 ttcccactta aaggttggtt ttgctaggag aagtctaaaa ttagcttgag aaaaaactca 180  
 atttaaaaag aaactctgga ggaagacat ttgaaacact tgccttttaag ttccagttat 240  
 agcctttttac cctcacaacc ctgctttgcc atttatttga atcaccaaag tgagactgcc 300  
 aattgaaatat attatttggat ttgcttaatt tgcctgtgaa atgtnatat caaatatatc 360  
 aaaatcatat taggtaattc aggtattttac atatatcagt tgatatcata aaattaggga 420  
 aatatattaa aaactctagac tatagtattt tatattctag gttatcaagg cagggggctc 480  
 acagctaaat tcttggctag acagagggca tg 512

<210> 14  
 <211> 971  
 <212> DNA  
 <213> Homo sapiens

<400> 14  
 tatgagaacc ttagacaaag aggaagatg tgttatgact tcgacatttt ctacacaaatc 60  
 gccggcaaca taagtcgaag gaattacgag agtccgcgga ggcaggctcg tttaggttcc 120  
 ttcccagggg aatgatatgc aatgaatttc aaacgaaata agcatttgga attactcagc 180  
 agaaaccgga gggggagagg catggcattg cgaagagtcg agctaagcag cgagcaagta 240  
 gcaagaccga aaagtcagag gagtaaatgt gggagttcac tcagggttcgg ggtagcaagc 300  
 tagagattac aatcattgtg cattatgttt ggcattggtcc ttccatcac ctacaatcat 360  
 cctgtcttcc aatgcctttc ctaaaatccct ttatttgata tggcgtatgt ttaagtttcc 420  
 aggcgcttat gtatatgac cgcttgggtt ttagtatttt aatattcctt gctattatat 480  
 gcttgggtcat tcccataatc caacagctat tagttaattc atgtttattc aaagctctgt 540  
 gtgcctttgc attgtccccc gtttctctgc gtgcattcat tgttctgcat ttgtgtctct 600  
 ccgacatag atgcttttat gagggttgta aatatggatg tggcgtcttt ccacocgtgc 660  
 caggagatg caggaagacc ttgtatgtta caatgaactt caaatttaaa gccctctgtt 720  
 cccacattta cccaagatt taaattcaga atgaccttg tggttctgca caaaggtctc 780  
 atgggtttttt ccaagatgtg tbtgattttt taaattctcc ctatgatgca cattttgctg 840  
 cctccttaat tgtttgcgaa ctgtcaacttc tccctcatcc attttttacc ctttctatat 900  
 tcagttcacc actctccctt aaggctccta catactccca tatgttgta ttagaatata 960  
 ttgattctag t 971

<210> 15  
 <211> 2311



<213> Homo sapiens

<400> 16

```
ctgggcttag ggaggcaagg agctggggag acagtgggtat cagcagcagc ctggggagca 60
tttgatggcc ccagagggtg tatgtgacca gggccagcta gaggaggcag ctccaggcta 120
gcacccaac aggaagaagc agtccttagg ccggtggct tcagcaatta aatcagggtt 180
gcatctcatc atgagtggat cccacagcca ggcagattga tagctgtgat cgtcctgacg 240
tgttatgtgt cctctctcgg atgcaggggc catagtactg acctcactga aacatatgat 300
ctgagaaaagg ggggtggtgt tcccaaaagg aaagggggag gagg      344
```

<210> 17

<211> 1027

<212> DNA

<213> Homo sapiens

<400> 17

```
tgaggcggga gaatcgcttg aacctgggag acagagggttg caktgagcga agatcacacc 60
attgcactcc cagcctggga gacagagtga aacgctggct aaaaaaaaaa aaaaactgca 120
cttggcttag ggaggcaagg agctggggag acagtgggtat cagcagcagc ctggggagcga 180
tttgatggcc ccagagggtg tatgtgacca gggccagcta gaggaggcag ctccaggcta 240
gcacccaac aggaagaagc agtccttagg ccggtggct tcagcaatta aatcagggtt 300
gcatctcatc atgagtggat cccacagcca ggcagattga tagctgtgat cgtcctgacg 360
tgttatgtgt cctctctcgg atgcaggggc catagtactg acctcactga aacatatgat 420
ctgagaaaagg ggggtggtgt tcccaaaagg aaagggggag gaggatgact ggggtggcaca 480
gaacgagtag ctgcccactg tctctcctgg ctttctctgt gcccagtggt ctccagtcaa 540
ctacagggtg acatggtagt acagctctgc cctgtgcttg gggaccacat gtactctgcc 600
cgtgtgggca ctgtcctggg ccagcgattt ctgctgccag ctgagaacaa caaggcccaa 660
agacaggtcc tggatgaagc cctcctcaga cgctccacc tgacccctcc ccaggctgcc 720
cagctgcctt tgcaactcca cctacatcgg ctctctctcc caggcaccag ggcaggggac 780
acccctgttg agctcctggc accactggcc ccttatttct ccaggacctt acagtgcctg 840
gggtcccgct tacaatagtc ctccctctgt tctgacccc ctcacacaca ctggaaagtg 900
aggggtgggg ctctgcagtc agacaaacct aagatcacat cctggacagg ccaacttgct 960
tgctgtgtgg cattgggcaa gtaactttac ctctctggag ttgtgataat aaagtgctct 1020
acctcta      1027
```

<210> 18

<211> 644

<212> DNA

<213> Homo sapiens

<400> 18

```
ctatgcagtg ttattgaggc catgaaggtt tatgacggtt aaaggtctaa ttatgtattt 60
tactcttcat cgaaatagaa tccccctttt gtgcgacttc gcatttttgg ccataagttc 120
catgtgcctc ctgtcccttg tggccctggc tctgagtgtc gccctcctc ctccctctgc 180
tctggccagg tgaggcttct cctccagggg ttttccacct ttgctgtggt tgtctcttcc 240
accaagaga gccctcctgt tccccaccac atccctgccg gcctctgacc tgtctgtgtc 300
```



tccagctctt	cccagaagcc	ctccctggca	gtcctgtgct	tctctgtgct	gatctgtgta	360
gcaccacagc	ctcctgtata	ccctgagcta	tgctctcaa	ggccctcac	cagctcatcc	420
cctcctgtgg	cacaagccgc	tgcttcaga	gttctctgc	ccagggaatg	aatgcccttt	480
gagagaccac	acatatgtctg	caagtccagc	cctgctcaga	gcgctcttt	gccaaataat	540
caccttgтта	ttaaagatgc	gattgttcta	ctagactctt	ctattcttta	gggtccacct	600
qaaagaccag	ttaattcact	ttttaaaaat	tactctcaga	gctc		644

```
<210> 19
<211> 655
<212> DNA
<213> Homo sapiens
```

<400> 19							
ctatgcagtg	ttattgaggc	catgaaggtt	tatgacggtt	aaaggtctat	tatgtatttt	60	
actctctac	gaaatagaat	tcccttttg	tcgcatctcg	catttttgyc	cataagttcc	120	
atgggtgctc	tgctccctgt	ggccctggct	ctgagtgctg	ccctctctcc	tcctctgct	180	
ctggccaggt	gaggtctctc	ctccaggggt	tttccacctt	tgtctggtgt	gtctctccca	240	
ccaaagagac	cagctctggt	ccccaccga	tcctcgccag	ccctgacct	gtctgtgct	300	
ccagctcttc	ccagaagccc	tccttgccag	ctctgtctct	cctctgtcgg	atcctgtgag	360	
caccacagcc	tcctgtacac	ctgagctgat	gcctctcaag	gccctccacc	agctcatccc	420	
ctctgtgtgg	ccagagccct	gctttcagag	tttctctcgc	cagggaatga	atgcccttgt	480	
agagaccaca	catatgtctc	aagtcacgac	ctgtctcagag	cgttcttttg	ccaaataatc	540	
aaccttgtaa	taaaagctgt	atgtgtctac	tagacctctc	tattctctatg	gttcaccatg	600	
aaagccaagt	taattcactt	tttaaaaaat	acctcaagag	ctctgtgtgt	ggccg	655	

```
<210> 20
<211> 532
<212> DNA
<213> Homo sapiens
```

```
<220>
<221> unsure
<222> (270) .. (313)
<223> a, c, g or t
```

<400> 20						
aaaaaaagaa	aaaaagaaca	agaaagaaaa	atggtttatg	tgaactaaaa	ggttgtttgc	60
atatttgggg	caaataacag	caccaaattc	ccagatccta	aatgtttcag	ttatgaaata	120
tttgaagtac	ctctgaattt	acacataaggc	atcccaacta	tgtagaacct	catgtgattt	180
aagatttttc	atctatcaaa	agggaaaaatg	tggcttgcca	tatgtataat	tttgtcatct	240
caaaaaagag	atataaagtt	aaaaattagn	nnnnnnnnnn	nnnnnnnnnn	nnnnnnnnnn	300
nnnnnnnnnn	nnnctataca	ttctgtttaga	tgggaattgc	gacgtggaag	tgatcactt	360
ccgtgtttac	gtccctgtgt	aaaaacaata	cattatccta	ttgatgacgt	ttctccaaca	420
gaaactgtaat	catctccaag	gttagaaaatt	gttttttaaa	taactctcaac	cagcgttaac	480
caaacqtgtt	attttccaa	gttatgtaac	aaaattcaac	aaactcaatt	tg	532



```
<400> 23
acagattaaa actgtaacct actattttcaa aataagttaa atttaagaaa atgataagcg 60
acatgaaaga acagtgtaaa tcagaattag aaaaatttaa gatgacataa cagaactcaa 120
gaatagaatt ataaatgaaa gaaaaatttt ctgaaataaa aaccacagaa gaacaccaa 180
gtgagtaaac aaaaaagaca atgccttagg gcagcagtct ccaaagtgtg ttccagtcct 240
gtagaccctc ttaggggacc tggtcacagt taataactaag atgggttaatt gcttttgcca 300
actttgggaa aagcacatct tgtttttttt tttaaaactga catttgcatt gataatacaa 360
aagaaatggc aggtaaaact accttagcac taatcaagaa agtgacacca tatcatattt 420
agagtcttca ctgccatggc a 441
```

```
<210> 24
<211> 604
<212> DNA
<213> Homo sapiens
```

```
<400> 24
acagattaaa actgtaacct actattttcaa aataagttaa atttaagaaa atgataagcg 60
acatgaaaga acagtgtaaa tcagaattag aaaaatttaa gatgacataa cagaactcaa 120
gaatagaatt ataaatgaaa gaaaaatttt ctgaaataaa aaccacagaa gaacaccaa 180
gtgagtaaac aaaaaagaca atgccttagg gcagcagtct ccaaagtgtg ttccagtcct 240
gtagaccctc ttaggggacc tggtcacagt taataactaag atgggttaatt gcttttgcca 300
actttgggaa aagcacatct tgtttttttt tttaaaactga catttgcatt gataatacaa 360
aagaaatggc aggtaaaact accttagcac taatcaagaa agtgacacca tatcatattt 420
agagtcttca ctgccatggv aaaaagaaaga aagaaagtaa gagagagaga aagagaaagr 480
gagaacacaga gaaagagaga aaggaaaaga aagwtaagag aaagaaaaga aaggaaaaaa 540
aagaaagaaa aaaaaggaaa ggaaagggga aagaaaaaga aaagaaaaga aaggaaaagt 600
tgaa 604
```

```
<210> 25
<211> 406
<212> DNA
<213> Homo sapiens
```

```
<400> 25
tttggtagaa gcatatgaag aaaatgaaag ctcatggaaa taggtagttg gaaagcaaa 60
aggattttgt tggctcttgg agataatcca taaatcagtt ctttgatact atgcccaaac 120
tctactgtac acttgtgagc aaatgagagt gaaaaaggca tataacgtct tagcattatg 180
aaaatagttt taactttgca gatccccctga gagggctctg gggataccca gcagtccttg 240
aaccacagtt ttagaaagta ctctgggtta gatatgattt tctttttctt tctattgtaa 300
aagtccaagt aaagtttatt tccctctatc ttattacaca agcatattaa caaagggaagc 360
taaaacaagg acagcagtcct cagtactcag tatattttct attag 406
```

```
<210> 26
<211> 246
```



atggatcttg aaatattgac atttattaag gaaaactctt ccttagtaga aacatcattg 120  
 gaaagaccaa aataagtgtc tccatgaagc taggtaacgt cttattatta atattttttt 180  
 aaatcaggta 190

<210> 28  
 <211> 653  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> unsure  
 <222> (229)  
 <223> a, c, g or t

<220>  
 <221> unsure  
 <222> (356)  
 <223> a, c, g or t

<220>  
 <221> unsure  
 <222> (443)  
 <223> a, c, g or t

<220>  
 <221> unsure  
 <222> (474)  
 <223> a, c, g or t

<400> 28  
 ggaatttcca ggcttatcca ctccagtgtgta tgtggcagga cgagggtttg agctgcagtc 60  
 catgtggcta ttgattcagc ttatgtttctc tagtgctggg caggggaggag ctgaccccca 120  
 tgggtttgtt atgtgtgctg gttagggccc tgcattgccag tcaagctcct gtcctacagc 180  
 ctgcctgttg gaggatctca gtgtgaggtc tggagccctg gaacgaggnc cacctgggct 240  
 cactctcttc atactggagc agggaaaggg cagagagagc tgcagaccgg aaagtggatg 300  
 gtctgggggtc ggagtcgggc cctgtgcacc agctgtgagt cattaagcca gactnaggc 360  
 taaggcttcc tcactgttta aacagcgaca cgcaggggac tgctcatctt tcaggtgcga 420  
 ggttggggga gtgggtgggtg ggnacaggca tgggttaactg catgtggaag gggntgtgtg 480  
 tcctgggtat ctggaaagtca cacgtgggta taaactggga gcatgtgtgt gtttgtaaat 540  
 agtcttctc cccaaaaatat tctaatatag ctccacaagca cgcacgtaag ccttcaagat 600  
 agaaatctgt gagtgaagaa aatgaggcaa agggaaaata agaaaagaca gct 653

<210> 29  
 <211> 822  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> unsure  
 <222> (806)  
 <223> a, c, g or t

<220>  
 <221> unsure  
 <222> (818)..(819)  
 <223> a, c, g or t

<400> 29  
 cacaattaag aaacactggt aggaaattta ctcaaatgat ataattgatt aagagttagg 60  
 tcttcctata agtatcatct atgactcatt aaatactatg aattttgatg tccaaaaaca 120  
 aatacagggtc tgattatgta caattccaga aatatcatta attaatcacc actcattttt 180  
 aagatgtgtg aagactgtaa tattggctag tgaattttat cagtattaat atgcatagaa 240  
 cccacattcc tctttttgat ttgatgtatt atagcatgta tgtattgcta tttttctctt 300  
 tttttgaagt ggtgaggaat catgcacagt caatatgctg gggtccctta gaaatgactt 360  
 tagctcctgt ctgaaggcag gaaaaacttc tttttaagga actttcatca ttgcctttta 420  
 ctttttctat gatggttttc atgagcactg aaatcacttg gagaggcaat gcaaaagaaat 480  
 ctatctgaaa cagcttcttg gcaccttgga gttacagcta tgaaggggctc caacgtaagg 540  
 gaagcttaat gcttccgaat attgacattg actccttggg tgaatttttg tccaaatata 600  
 aaattcttca tggttcaaca ctaaaatgtaa taaatgaatt tcatatatc ttacatgata 660  
 tctttgagat taaattaatt atccttttgt aggaactgac agctttgggt agattatttt 720  
 ttcagttgaa atgtgttgc aacaatatgc ttacacttga acgctgtttt tcatattgat 780  
 aggaagacac aaatttctca gggaancagc tttgtgannng aa 822

<210> 30  
 <211> 682  
 <212> DNA  
 <213> Homo sapiens

<400> 30  
 atcagggtaca cagagtttgc aagggtggtat ggcaaaaagga tcacagattc ttacaaggtc 60  
 attataagta ctgcttttggc taggaaaaatg atcttttttc acccaatctg agggaaaaga 120  
 tactactttct tctctacttt cctcttttcc cattgtcctt ccttaaagac tagcagcagc 180  
 agaatttggga aaataaataa tgggcatggt ttgctaataa tcatgacaaa ctataaataat 240  
 ctgttttgaa ttttacttgc ctgtttctaa attttggagt ctagagaact gctatcaaa 300  
 ggtaaaaatat agtgattcac ctgcagtttt ggttacaggt ttcatattac ataataaagg 360  
 gagaacttga gcccccactt tccccagtg tatctcttgc ataggcaacc tctgtgctt 420  
 aaatgttttg gagacttttg gatgtctgat ttcaactgta ccgtgaaaca ggtagtggct 480  
 tgacttagta agcatctgaa ggactgtttt gttctactct tgcagagtag agtagttttc 540  
 aaaaggaag gaaaggaatt gttgagtggg acctatgaag tatagcagga tggatagaat 600  
 atgaggcaga tgggtcctag ttgtctaaag agcttggggc gtctgataag ttgtcttctc 660  
 tgccaaacaa gggagtccacg tg 682

<210> 31  
 <211> 1498  
 <212> DNA  
 <213> Homo sapiens

<400> 31  
 aatatatccg gcctatcccta acagtattgg aagggtggacc ctttaagagg taggtatcaa 60  
 tgacattatc actgagacaca ggagtgggct cttgatagaa aaaatgaatt cagctcaact 120  
 tcctctgtct cacgtgctct catcctctca ccttttacta tgggatgacc ctcaacagat 180  
 gccagtgtca tgttcttggga ctttccagtc ttcagaatca tgagccaaat aaatctcttt 240  
 tcttttactt aattactttt tttttttttt tttttagtag atgggggtctt attatgtgtc 300  
 ccaggttggg ctgcaattca tgggctcaag cgatcctcct gcctcgccct cccaaaatgc 360  
 tgggaattga agcataagcc accacgcccga gcgataaatc tcttttcttt aaaattatcc 420  
 attatccaat ctgtgggtac agcaacagaa aatagactaa gacaagagggt aaaggaaaagg 480  
 aggcagggaa gtaggcagga gggcaggaaa gaatgaagga aagggaaaacg aagagaggca 540  
 ggggaaggaa ggggtgtgga caggagagtg ggaagggaag ggaagtgagg aaggagggca 600  
 aggaggcaac gaaacaggga ggcagggaagg acaggcaacc tcggtgactg aaaagcttat 660  
 acaatgtgta taccccaagt gactcccttg tttggcaaga aagacaactt atcagacggc 720  
 ccaagctctt tagcaacta ggaccatct gcctcatatt ctatccatcc tgctatacgt 780  
 cataggtccc actcaacaat tcctttcctt tccttttgaa aactactcta ctctgcaaga 840  
 gtagaacaaa acagctcttc agatgcttac taagtcaagc cactacctgt ttcacgggtac 900  
 agttgaaatc agacatccca aagtcctcaa aacattttaa cagcagaggt tgccatagca 960  
 aggaatacac tgggggaaaag gtggggctca agttctcctt ttattatgta atatgaaaac 1020  
 tgtaacaaaa actgacagtg aatcactata ttttaccctt tgatagcagt tctctagact 1080  
 ccaaaattta gaaacaggca agtaaaattc aaaacagatt attatagttt gtcattgatta 1140  
 ttagcaaaaac atgcccatla tttattttcc aaattctgct gctgctagtc ttaagggaag 1200  
 gacaatggga aaaggaggaa gtaagggaaga aagtgtatct tttccctcag attgggtgaa 1260  
 aaaagatcat tttcctagcc aaagcagtac ttataatgac cttgtaagaa tctgtgatcc 1320  
 ttttgccata ccaccttgca aactctgtgt acctgatcaa tgtaatatgc ttttatcctc 1380  
 acattcggag agttttttaa atatgggagg tggccaggca cgggtggctca tgccctgtaat 1440  
 ccactgcgcc cggcctctaaa aagactatta aagcaagttt ctggattaat ctgagttg 1498

<210> 32  
 <211> 447  
 <212> DNA  
 <213> Homo sapiens

<400> 32  
 cagatgtttg tgcagaagc tgtgggttta cgtctccttt gtgcatgtgt tccagacata 60  
 ccagtggcctt ggtatttttaa catcatgtct aggtgtgcag ggtagttttt gagttataat 120  
 aggtatgcga gcgctgtggg attacttggg tgtttatgta aaaattattt tgacctcact 180  
 tctgaaatga gtgttagtag aatcatcttt agaggaggtt ccaaggcatt gaaactgagat 240  
 acctgcactg tttgctgtaa atttaagctt aaaattgaaa ccagggttatc agcatttcat 300  
 gccaggagag agtggggcatg aatgatttca ggaatatgaag agctagattt cagccttgaa 360  
 tttgcttcca ccctctctgt gcaaaattag gtgggctcac tgagcaactt atctgcacct 420  
 ggtaatttat tttaccagac aggggtgt 447

<210> 33  
 <211> 176  
 <212> DNA  
 <213> Homo sapiens

<400> 33  
 gtccctttgta attgactttt ttctactgaac atgatgtttc aattactata gcattgtatca 60  
 gtactttatc acccatgggg tgttaaaaat acagttttaa aatacagtct ttcacatgtc 120  
 ctacaaagtg ctagaaaaaa aatttttaaaa attgacgggg cgcaggggct gatgcc 176

<210> 34  
 <211> 307  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> unsure  
 <222> (28)  
 <223> a, c, g or t

<400> 34  
 ggtaagagaa gcattctgtat aggaggcnag agatctgagt ccttttgaag gcctatccctc 60  
 tgctctgtat ctcaattact gttcttcatt tcaattatct ttacctacta ttcagttccc 120  
 ttgatctttt cttcttgggg gctgtcttag ggtcagggag attgcagaag caccagaact 180  
 aggagcagcc ctgagacatg gggagtgtga gctgaaggag gaatggcagg atgaagaatt 240  
 ccctaggtga ggacgtgtga ggggtggctgg gagaagggag ggggtggctac gaattggacgg 300  
 aggggat 307

<210> 35  
 <211> 1104  
 <212> DNA  
 <213> Homo sapiens

<400> 35  
 caacagctga gacagaaaaa aggtaaggaa gtgttggggg ctgggacaac cagctcccca 60  
 acaactccta ggtgttttaa gaaggaggca ggaagacttg tgaagatggg aactatacaa 120  
 gaggcaggaa aaaagacaga gtgtgggtta gtaagatctt ggctcacttg attggttaaca 180  
 gtgaataaac agtccggaga gacttcccca ccaccagct ctactgggtt caaatctcgg 240  
 gttcctcaag gagacaagac tgtaagagag tttgcagaga agagatgagg gtgggttttag 300  
 gtaggaaatg tcagtatggt atggaactgg ggaacaggat tccaggataa ttccctgggt 360  
 taaaaataaa ggaagtttct gtaatatggt gtacctgata aatctgcctg tgttctttta 420  
 ttttctaacc ctaccctcc agaattgtcca tcaggaaaagt ctgaaccaga accgagttta 480  
 ggtccagggt ctcgttctgg caaatcttct tccttacctt ctctctccac cctccacct 540  
 atgccatggt ttcccttagc cactcccccag ctcggtggag gaaaggcagg cctaactagg 600  
 taccgtcttc ccgaatttgc tcaatgatag ctgggtgggt ctagctgggt tccagccact 660



```

tgtaatgtgg gacatctctc accccaactt tgtagggtgga gcaactgcta cagagggttaa 720
tatgattaac ttacattcc atctttctgc tgcctccaaa cttaacagca ggtaactctgc 780
ttctagcaag tgggtgaagg aagagaagca tctgtatagg aggcgaagaga tctgagtcct 840
tttgaaggcc tatcctctgc tctgtatctc aattactggt cttcatttga attattctta 900
cctactattc agttcccttg atcttttctt ctgtggggct gtcttagggg caggagagatt 960
gcagaagcac cagaactagg agcagccctg agacatgggg agttggagct gaaggaggaa 1020
tggcaggatg aagaattccc taggtgagga cgtgtgaggg tggctgggag aaggaggagg 1080
tggtcacgaa tggacggagg ggat 1104

```

```

<210> 36
<211> 1020
<212> DNA
<213> Homo sapiens

```

```

<220>
<221> unsure
<222> (444) .. (485)
<223> a, c, g or t

```

```

<400> 36
tcagattcat caagtgaagaa taaagttcgc ctccactgttc atgccccatc taagcttaaa 60
aatgcctatg tgctctcctg tagcctcact gcgtgctggt gtgcactgca cctctaatg 120
ggggcagtta acagatgaaa ataacctctc caaagtgcgc tgaagaggct caacctaaag 180
gggctggaac ttgtcttata aaataatata ttacatttgg ttactaaaac actagggttc 240
ctttaattga agaattccag tttagtggtt tctcaagtac agtgagtttc aaaggatagt 300
ggtagctagt agtattagtg aaaatagtca taactagcat ttattgaata ttatttgcca 360
aaacgtgcct aacaatttta catgtattat ctcatctaac cagcacaaagc aaccttatga 420
gagggtgaatt attgttatcc aaannnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 480
nnnnnttttt agtattacac agaagatctg ggactcaaaa ttaacaggct attatcaaga 540
acatttatga agggaccaca ttatatatga cagcgttgga tgtccagtga attttgcatg 600
atacggagtt gaattagtc ctggcttcaa ggactttcct ttctctttta tcccttctat 660
tctgttcaca cttttctctc agatactgga actataagcc caaaactact taacatgaaa 720
gacttttaggt acacgattcc ccactggcag ctgctttaat ggtgaaggat ttcttgagta 780
ctagcagaaa acataatata taaagagagt tgtgtgctag acaaatggag taagaaacca 840
tgatttcttg ggggttttgg ttgtctatct tcaagctaaa atgccccct gggatttcag 900
atggtcataa gaaaatttat caagtgaaaa gtttaaccact gccaaactca tatgattgaa 960
aattggccat tgttatgttt agaataattt ttgtgcatct gcaattaaga ataaaaagtc 1020

```

```

<210> 37
<211> 1347
<212> DNA
<213> Homo sapiens

```

```

<400> 37
tcagattcat caagtgaagaa taaagttcgc ctccactgttc atgccccatc taagcttaaa 60
aatgcctatg tgctctcctg tagcctcact gcgtgctggt gtgcactgca cctctaatg 120

```



```

ccccaaagcct ctttacattt ctaagccctc acctaggcac cacggtgaag ccagcagact 540
ttgcttatca gaccttgctg caatagccac acccccatca caaaccccc caccctgcac 600
agggggagggt catgggaaac ataaacaaac ttacctaca cctcctgtga ataaacgtca 660
caaggtaata tgtagcaaaa ttaaccagca aacaacccca ggatgcggcc atacgaaaga 720
actccatcaa actccccctc ccaatataaa cccctcattc tgtaagcttg gggctacttc 780
ctctctgact gtttaaggag cagccagcag gtttaataaa agttacctgc ctaaaaaaa 839

```

```

<210> 40
<211> 473
<212> DNA
<213> Homo sapiens

```

```

<220>
<221> unsure
<222> (463)
<223> a, c, g or t

<220>
<221> unsure
<222> (465)
<223> a, c, g or t

```

```

<400> 40
cgagggccca catatgcctt tgaagagctg aagtttgagg tagaaaaact tagtttctcc 60
ttagttttta tcccgctctt tgggattgcc attgaacaaa gtatatttta tgagggataa 120
gtcaaaaatg ttgcaaaatc atagcagtaa gaacaatagc aaccatcatt catgggaccc 180
ttaatctgtg tcagcctctt gggcattttt tcatcagtt ttacgacaac cctgtcagac 240
ggttaatatg atttgaatct ttgcagtcaa ggaaactgaa tcctaggcag ggtaagtaac 300
ttccccaagg ccaaatagta ttacagtagt taacctttta ttttgtgttt tatttaaagt 360
catcatcaaa acatatctta atgagcattt attgttgtaa agctctttta gccaggtaag 420
ttcagggcta tcctttttaa gcagtaacttt gatgtttttt ttntnttttt ttt 473

```

```

<210> 41
<211> 976
<212> DNA
<213> Homo sapiens

```

```

<400> 41
aatagttcat atagggattt ggccctcgag cagtaattcg gcacgagaga tctttttttt 60
tttttttttt tgagacacgg tcttgctttg tcgcccgggc tggagagcgg tggtagcatc 120
atggctcact atagcctctg cctcccagac tcaaaacaac ctcccacetc agcctgctga 180
ggaacttggg actacaggta taagtgccac tgtgccacgc taatttttgt atttttttgt 240
agagacaggg ttaccacatg ttgccagggc tggctctcaa ttccctgggc caaagcaatc 300
ctcctgcctc aacctcccaa agtcctggga ttacaggcat gagccaccac acctgctctt 360
catttttact gttttgaatt caacatttgc tccagtatga atcaaatctt gaccaatatc 420
accctaccca atatcttaca ggcagatgcc tcacctccca gtagtaactta gaaaaccagt 480

```

gcatgagag	accgcgttaa	tttaaaaaaa	aaataaacaa	aacatcaaa	tactgcttta	540
aaagatgata	ctctgaacta	ctgcggctaa	agagctttac	aaacataaat	gctcattaga	600
atatgtttgc	atgatgactt	taataataac	acaaataaaa	aggttaacta	ctgtaatact	660
atttgccctt	ggggaagtta	cttaccctgc	ctaggatcca	gtttccttga	ctgcaaatga	720
tcaaatcata	ttaacctgtt	gacagggttg	tcgtaaaaat	gaatgaaaaa	atgcccaagg	780
gctcatgaca	gattaaaggt	cccatgaatg	tctgttgcta	ttgtctttac	tgctatgatt	840
ttgcaacatt	tttgacttat	ccctcattaa	atatactttg	ttcaatggca	atcccaagag	900
acgggattaa	aactaaggag	aaactaagtt	tttctacctc	aaacttcagc	tcttcaaaag	960
catatgtqqq	acctcqq					976

```
<210> 42
<211> 194
<212> DNA
<213> Homo sapiens
```

```
<400> 42
gtgaatcaaa atcaccattc taaaaaatta ttacttatat tgataaagcc tggattctct 60
caacttgttt tgttttgctt tgcttttttt ctttaaccaa tcaatctctt attgatagat 120
tttggtgtaa aagatatata ctagtttctt cagaaagatt aacaataaaa atttgtgtta 180
tttcaaaaaa ataa                                     194
```

```
<210> 43
<211> 378
<212> DNA
<213> Homo sapiens
```

<400> 43									
catctaaact	tgaataataa	agttttacca	ccagttacac	ataacggcgt	tggtatggtt	60			
tatatggatt	cactttcatc	ctctagcaa	taggaataac	agatcattgt	aatatatata	120			
tatatatata	tatatatata	tatatatata	tatatatata	tacaggctct	gctgaattga	180			
aatgggtgaaa	tcaaatcacc	attctaaaaa	attattactt	atattgataa	agctctggatt	240			
ctctcaactt	gtttttgttt	gctttgcttt	ttttctttaa	ccaatacaatc	tcttattgat	300			
agatttttgtg	taaaagagata	tatactagtt	tcttcagaaa	gattacaacat	aaaaattctg	360			
tttttttcaa	aaacataa					378			

```
<210> 44
<211> 662
<212> DNA
<213> Homo sapiens
```

```
<400> 44
catatctgca ccacgtctag aacaacttcc ctctccaaga gaattaaaat acattttttg 60
tttttccctt caatactctg tagtactact gttctggaat ttcagttctc atgcaacata 120
cggcgccctt tgcacagtga aaacgtaagt atgataagtc ccagtatgtg gaagaacata 180
aagaaacccaq qagtttgtat cetaaacaac ttttaactgq qcctttgttat qatttccacq 240
```

```

tgtgatactt tactcattct gagattaaca gtcgcactgg tgaactgac agccgctata 300
tggccatact aatgtaactt attacaagac aggaagtggag aagagttggt tgatctagtt 360
gaaaccattgg gggaatttgg gaaagcagag taaatttgct aatttggaag tctgagactt 420
cagagcttgt tattcttgaa gcagttgtta aaagtcagtg gacatcctga ttctcagggtc 480
tccgatgtgg atgtgcattc tctccggcag catgattttt ccaggaccag aatgtgacag 540
gagcggccccc gcaatagaat tgcaggctca caggccggct gcagcacttg gctgtattgc 600
gaggctcctt tccagctgct tagttcacat gatgcctggg ttataaaacc tagtgaagtg 660
tt
662

```

<210> 45

<211> 1026

<212> DNA

<213> Homo sapiens

<400> 45

```

cggcacgagg ccggtttttt tttttttttt ttggaatat atgttaagaa ctaggggggt 60
gtgtcccaag ggaggtcagt gataccagga cagcacca tttgcagcac aggagttcag 120
acagaccagg ccttggtatc acacagagga actttctccc aaaagaacca atcaactctc 180
aactgttggt gttatttgca taactcaaat gagaagcgag ggcttttgg tttaactctc 240
gtgtcgtatg aggtctgtaa tgagtcatat gaacactgga attgtggaat tggagaagag 300
aatgaggacc cacacactat gataaaagt aaaaagcaag tcaagagatt ccttctcttg 360
tactcatatc tgcaccacgt ctagaacaac ttcccttccc aagagaatta aaatacattt 420
tttgttttct cctgcaatc tctgtagtac tactgttctg gaatttcagt tctcatgcaa 480
cataccggcc cctttgcaca gtgaaaacgt aagtatgata agtcccagta tgtggaagaa 540
ctagaagaac ccaggagtgt tgatcctaaa caacttttaa ctgggacctg ttatgatttc 600
cacgtgtgat actttactca ttctgagatt aacagtcgca ctgggtgaaac tgacagccgc 660
tatatggcca tactaatgta acttattaca agacaggaag tgagaagagt tgtttgatct 720
agttgaaacc atgggggaat ttgggaaagc agagttaaatt tgctaatttg gaagtctgag 780
acttcagagc ttgtattctc tgaagcagtt gttaaaagtc agtggacatc ctgattctca 840
ggctccgat gtggatgtgc atcctctccg gcagcatgat ttttccagga ccagaatgtg 900
acaggagcgg ccccgcaata gaattgcagg ctcacaggcc ggctgcagca cttggctgta 960
ttgcgaggct cctttccagc tgcttagttc acatgatgcc tggtttataa aacctagtga 1020
agtgtt
1026

```

<210> 46

<211> 112

<212> DNA

<213> Homo sapiens

<400> 46

```

tggtttttgt gtaagttaaa gatgatgttg agcaagccac tttaaaacaa cactgatttt 60
tccatataaa caatagtttt atatgaagaa gtgtcatttt gtttttcatt tc
112

```

<210> 47

<211> 249



```

gtattagtgt  ctggtcacat  ccatgatgct  gtccctcttg  aggtctccag  gacacatgtg  660
catgagttcc  tctaggaaac  cacggtgtac  aactgctggg  ttgcaggccc  agggttctct  720
ccactctctc  atccctccaa  gtagggtcca  gctggcctta  gtgctgccat  gctgagagct  780
caggagccaa  atctgccagc  accctgatct  tggacttcca  gaactgtgag  aaataaattc  840
ctgtctctga  agccactcag  tccgtgggat  tctattagca  gtccgggactg  acttggacac  900
tgttcttgga  gcaacgctag  tggcctgggg  aagctgggcc  ctgggaccag  cccctgggtc  960
cggccactcc  atggagcccg  tggcaaaagg  ctgatgtgtc  ctcagtgaat  ccaggtcaga  1020
gagcggtcga  gcagcaacct  tggggagcca  agtggatgaa  aatctggaca  agagaacaaa  1080
gccaacctgt  tggccaaggc  gaactcaatc  gattataccc  cagagccccc  cgtggctggg  1140
agcagccgtg  tgacagagaa  gaaaggggtg  ttctcatggg  ccggccctgc  ctgctggcaa  1200
atggggccca  cgagtgcctc  gccctctctc  cagcggcccc  acgggattgt  ctgggtgtgtg  1260
ggaaggaacc  cctccattga  gtctcagagg  agacaggatg  ggggagaccg  gcatcaggat  1320
aagccttggt  caatgaatac  ctccaagggt  aaggctgcgc  aggataaacc  cagcgtgggt  1380
tatcagccat  ttggttccc  aacagttttg  ctcttgcatt  tcattgtcct  caaagggagg  1440
ctcctccatg  ggaatggcca  ccgtcccaga  ggcttgcatg  cctcctggat  tggcacaaaa  1500
gcctgggagg  gaggcccatg  agaatacctg  tggccacag  aagaaaggga  ctgcccacag  1560
gtctgcagc  tcagctgggt  gacttttggg  aggagcctct  ccaagagtaa  gttctgtcat  1620
ctgtgaaaca  ggaatgacgt  gagtactacg  tcttttatac  gccagggtgt  aggtctgcgc  1680
ccggtcttgg  gtgatgtcca  gtgaattacc  aagtctcttt  ttctgcctcc  ttgcagagca  1740
tgcagtatcc  tggacagcgg  aactgagcaa  agcccatgca  ctccgcccc  aacctccag  1800
ctcttcacct  gccagggtt  ctatcccagc  ttggtgtcct  tgcctgcaag  cacagggtag  1860
cttcacagcg  agacctggcc  tgccctgcaa  gtccacacaa  caggagccca  ccatggccca  1920
agccatgccg  gccacaccaa  gtccaaaggc  caaggctgcc  ctgactacc  agctccaact  1980
ggttgctcca  tccgactccc  cagctgcctc  ccttttctcc  aaagacctgg  cttaaatttc  2040
taacctgtct  acctgcctgc  tgggatcttg  gaccacttgc  ttcacctctc  tgaactcag  2100
tctctctatc  tgcctcttgg  tctcatcagc  tacaatgtaa  ctgatctcat  gagtttttat  2160
tttttgagaa  tcaagtgaat  tgatataggc  aaactcactg  aaatgctgct  caagggactg  2220
gtcacctgac  gcagccaaac  ctgcataagg  ccagagggat  ggcagaggcg  accctgggtg  2280
tagctcccca  tctacaatgt  gctgtttgca  cctcagggcc  ttgtcacagg  caggtctccc  2340
tgaggaaatg  ccatccccc  ctctctggtc  tctctgtccc  attttccagc  ttgcatactc  2400
tttgagggca  gggactgtgt  ctgtcttggt  cacagtttta  tccatagtct  caggataaag  2460
ccaaggctgc  tggccaaaga  ttgtcatggg  gggaggggacg  gggcccgctc  tatgtgctgc  2520
agggagggtc  ccaccttccc  caaagtcccc  ttctgccatg  ccctgaaaga  aatatttctc  2580
ggggccatca  aggggtgaga  agccaacctg  tccctgggtg  ctgcagctgc  cataaagccg  2640
gcctcttggg  agacagccct  ctcttttccc  ctctcccctt  tgccgaacac  taaggcactg  2700
tccggatcac  ccaccaggag  ggtccagcag  ggctcttcca  aggcatagat  tgtgtgcaga  2760
ccacttaggg  atcataggaa  gagcctgact  cagcagttca  gggccctcgg  tctgggcatt  2820
tctgaccact  cctactgggt  gcccatgctg  ctggtttctg  gaccactcat  tgagaaggag  2880
ggctctctcc  cccaatctca  t

```

<210> 50  
 <211> 297  
 <212> DNA  
 <213> Homo sapiens

<400> 50  
 gtggcctaac ttacgtctctg gaaatcttaa cttaactaat ggcttaggga atggtttgga 60







<220>  
 <221> unsure  
 <222> (769) .. (770)  
 <223> a, c, g or t

<220>  
 <221> unsure  
 <222> (786)  
 <223> a, c, g or t

<220>  
 <221> unsure  
 <222> (797)  
 <223> a, c, g or t

<220>  
 <221> unsure  
 <222> (843)  
 <223> a, c, g or t

<220>  
 <221> unsure  
 <222> (845)  
 <223> a, c, g or t

<220>  
 <221> unsure  
 <222> (869)  
 <223> a, c, g or t

<220>  
 <221> unsure  
 <222> (894)  
 <223> a, c, g or t

<400> 51  
 ccgtattctt tgcctgtcta tagtatgtaa tagaccagct ggaggctata atgctacaca 60  
 ataccacctgg ccggttacagc aactatttat tcctgggctt ttcctccgaa agggatttga 120  
 aaaaaaaaaa aaagtcctgaa atttgggcct aattgctatt taccacgcga tagacacctg 180  
 ttctagctgc gacattggct catggatctc acacctgaga ccttagggag agtagagggg 240  
 aaatttcaag cagctgccag tccatttaga gatagacagc tttaacttgt ggggtttgcg 300  
 tgtttatatg tatacgcata tattttaaaa tactgtttgt ttagtatgta caccataaac 360  
 cagaggggat atattaaatg ctgtgtacca ttatttcaca gtcaattgct tatctgaagg 420  
 ccgtacacat actgggcgta cagctaccac tgtgattgct ttaaaaaataa tgcactgaga 480  
 ctgaattcag tatcaataac anggcacgtg tccttcaaaa tgtccactcc aggccttggg 540  
 ggaaaatggg ttcttaggat gaatcagagg gaaaatttta atcanacnta actnttcttg 600  
 gaaagattcg acanctntc agtcatttcc ttgcnaaat ngctncgaen tcnctctttt 660  
 gcnnnnntnn ataggggaac ccttctgtct tggtcagagt agcacaatct tctgttttag 720





```

aacattctgt tagcgtaggt gatcctctgt taaataattg taagcttttg gatttaacgg 1320
aagttgacgg tgactctetga ccttactacg cttccaacta ctgactttagc caaacctctc 1380
aagtttacag aggtgaaagc ccaagaaaatc ttttatttct atactcctaa tgactttaat 1440
ttcttgccct gtttcttaca ggatcttaat aaatatccat ttgtcttacc agaagcttgc 1500
atcctggggt gtatggaag aattcaaaag attcatgaac ttggatgtca tgtaggaaac 1560
caaaatacat aatatctgtc cagtaggttt atgagatcct tgagaccaga ggctatacga 1620
ttcattatatt acaagacatt ccactaacat ggtgcctgac agattacatg aaaaataaag 1680
atagatgaag cogaattgga ttccattcca tgcctttaac agccctatga gaccagaaat 1740
tactgtcctc ttcacagatg tgcaaaactga gcttcagtca agtcactaac ttgcttccag 1800
aatactgccca aaaagtgaag gatctgagaa taaacccaag gactcccagt agtcaatgat 1860
tcaccatata ttgattctct ttcgacaaga aatatattacc ccattttctc aatgccttac 1920
tccctggaga cttaaaatat aaaactttta aatatttctt ttaattcatt actcatgtat 1980
catgttcgta atgatcataa tttattcaga ccttcacgta agtatccaac aggtaactag 2040
aaattatctg agatggaatt actgggctgc ctagaaggga agacagcacc ctatgcctgt 2100
ttacagcaat catcttggtg gaagcaaaac agataaaatta tgacagccag atctaaaggg 2160
aaacaactaa aatggagggt gcaatatagc ttaaatattt gttggagaaa acaaggcacc 2220
tatgttgga gccattgttt ttcttaacaa cagctcaaaa tgatcactgt gattagagca 2280
cagccaacaa gatgtctgga cacagacatg aacccccacc agagaggaaac tgtgtctcaa 2340
ttgatcgagt agcaccaaag acactaaagca aacttgtaaa cctcaaatgt gagtttggga 2400
aataaaaattc gacataaact ctgaattttc tggatatgat ttcaacagta cacattttcc 2460
tattactccc ataaagtatt ttactgacat caaataacctc caagccttac ataattgtaag 2520
cgctgcctgg acactttcac atatacccat atctttggct tccagcaaca ttagcaattc 2580
accacttgca agttgaaaaa aaactacaga attatggaat tacaataggc ctagctagca 2640
tcaccaccaa caaatttact gcctctgtgt tatttgtaaa ttgattgttt ctctcttggc 2700
ttgtggcaag tagagaattg catagaaatg catgaatatt acacatttcc tcataaacat 2760
taacattagg attgaacttt ccccaactc aaaaattatt gatacccttt aataagtat 2820
tataacatac attggatata atgtgtctct cttagctttt tttgtttttt gttttttgtt 2880
ttttttcccc 2890

```

```

<210> 56
<211> 581
<212> DNA
<213> Homo sapiens

```

```

<400> 56
aggagaacct acaggcaaga catggtctct tctcagggtg atgggaagcc aagtagggct 60
ggcatgggtg agccacagct cgaggaggca gggcccgccc cctgcctgct ctgtcatggc 120
tcatgagtga tgggagagat ctgggcaggc aacctcctct catcctgcat catcagcctg 180
gacttggaac ttggctgctt tttctttctg cagttagcgg agggccttgg ccaaacacata 240
agcctttctg ccagcacttg gcattccagc tgacctcgac ccaaggccctc tgtgacttca 300
ggaggcgcca gctgggaagg gtcagggcag ttccaggcag agcacagacg tcagctcaga 360
catcctaccc ccccgcaacc ccccgccccc ggggtttcca gagcaaccac caccaccaag 420
ctccaggaca ctggaaaaaa aatctttgca aagaagcaag gggccatctc agaaaaatcca 480
gggtccccc aaattgatgt ggagaggagg gctttgacag cattcagcac tccagagggt 540
cacgaggata cagaaaccat ttggaggcac cctctgcttc c 581

```

<210> 57  
 <211> 833  
 <212> DNA  
 <213> Homo sapiens

<400> 57  
 aggagAACCT acAGGcaaga catggtctct tctcaggTga atgggaagcc aagtagggct 60  
 ggcAtgggtg agccacagct cGaggaggca gggcccgggc cctgcgctgc ctgtcatggc 120  
 tcatgagtga tgggagagat ctgggcaggc aacctcctct catcctgcat catcagcctg 180  
 gaacttgaac ttggctgctt ttctttctg cagttagcgg agggccttgg ccaacacata 240  
 agcctttctg ccagcacttg gcattccagc tgacctcgac ccaaggcctc tgtgacttca 300  
 ggaggcgga gctgggaagg gtcagggcag ttccaggcag agcacagacg tcagctcaga 360  
 catctaccc cccgccaaac ccccgccccc ggggtttcca gagcaaccaa caccaccaag 420  
 ctccaggaca ctggaaaaaa aatctttgca aagaagcaag gggccatctc agaaaaatcca 480  
 ggtcccccaa attgatgtag ggagaggagg gctttgacag cattcagcac tccagagggt 540  
 cagcaggata cagaaacat ttggagccac ctctgctctc cagccccacc caggcaagcc 600  
 ctggatcttc aagggaactga ttgtgtacct ggaataaac tcatgcattg atgagattca 660  
 gagtcaatc caccctaaaa tgcagagccc atagtattgg tgagtgttcc atgtgtctct 720  
 gaagcaaatt tagggctgtg gttcaaacat cgtaaaagt aaaaaaatt cactggatca 780  
 acacagtagg ctctttttaa ttagcctcat ttgaacttaa ttacatattt aaa 833

<210> 58  
 <211> 473  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> unsure  
 <222> (283)..(372)  
 <223> a, c, g or t

<400> 58  
 tctttttcta gtttcttaac tccaagtcac tgaattgagg tttttctttt tcaaatggg 60  
 cattttgtgc tgtttttttc tacatacgtt ttttgggtgc accccacata ttctgacatt 120  
 ttcattttga ttctgttcaa tatactttct gatttccctc ttgattttctt ttgtgtctg 180  
 gaatgtgcta tttagtttat gtatatattg ggatatattc gagatgttcc tgtgactgtt 240  
 acctatttta attctcatat ggtcaaaaga tatactttgt atgnnnnnnn nnnnnnnnnn 300  
 nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 360  
 nnnnnnnnnn nntgtgtggt ctgccattgt tgactgaaga gttataaaat atcagctagg 420  
 tcaagtaagt catTTgagtt ttcaagtctt ttatatcctt agtgattttt cta 473

<210> 59  
 <211> 538  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> unsure  
 <222> (355) .. (360)  
 <223> a, c, g or t

<220>  
 <221> unsure  
 <222> (380) .. (382)  
 <223> a, c, g or t

<400> 59  
 ttcacgcgatt ttggtttgg tgtttattat ttctcttatt tctgcttgct ttttgtttaa 60  
 ttgttctttt ttctagtttc ttaactccaa gtcactgaat tgaggttttt ctttttcaaa 120  
 ttggcatttt gtgctgtttt ttctacata cgttttttgg tgtcacccca catattctga 180  
 cattttcatt ttgattctgt tcaatatact ttctgatttc cctcttgatt tctttttggt 240  
 cctggaatgt gctatttagt ttatgtatat ttagggatat ttcagagatg tttctgtgac 300  
 tgttacctat ttttaattctc atatgggtcaa agaataact ttgtatgaat aacatnnnnn 360  
 aaaaattgggt tcaagattgn nntatgacct agaattgggt atgtcttggt aaatgttcag 420  
 tgtctbcttc aaaaaattgt tgttctgccca ttgttgactg aagagttata aaatatcagc 480  
 taggtcaagt aagtcatttg agttttcaag tcttttatat ccttagtgat ttttctat 538

<210> 60  
 <211> 468  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> unsure  
 <222> (371)  
 <223> a, c, g or t

<220>  
 <221> unsure  
 <222> (378)  
 <223> a, c, g or t

<220>  
 <221> unsure  
 <222> (396)  
 <223> a, c, g or t

<220>  
 <221> unsure  
 <222> (398)  
 <223> a, c, g or t

<220>





<213> Homo sapiens

<400> 63

```

caggagataa atacgcagtt tataaaagtt ttttctaaat gctcttaaaa aaagataaaa 60
accagagaaa tattaattag ttcagtaata atagaccggt aattctgttt gtttcaagga 120
gtattagggg aacagatttg aattaaccaa gcgtttacta tgaacagctg tgaagaactg 180
cagtactggc aaaactttta aaaaggagga ggtgtggaat tatctttatt ttgtcatgtt 240
gtcttttgat actcaagaag caatccgaga ttcaccaggt cattgatact tttctcttga 300
tggaatttcc aagtttcatt ctaagtgcct actctgcata tcaagcatgt gaatgagtga 360
ataagctatt tattttcttt aaaagttagc taaaataaac ttgtttttct ggtaccaatc 420
tcgttgtcca tgttctctcg ctaaacatta cattagttga tatttaagtg ggtatggtcat 480
tgcagaaaagtg ggggaagaaa gtctcatcac ctccactgta gattttacat atgtttatgt 540
aatttttgta attaccagtc ttctgacttc aacacaaata gcaaattgca aagtgttact 600
tggggttctt gggatggggt ggggaagtcac tctgacaatc tcagaagttc taaagaacta 660
gttttatctt aactatcact aatttgcaaa gtacatgttc ctttttctct tggctctaata 720
tcctctctaa caaaagtatt tctaaatttg acattaatct ctggtgcttc ttcaatttgt 780
gcactcgcaa actgattttt ttattaaatg agataacatg aaaatatttg caaatataag 840
atgataataat ttctctctgt tctctctgtc gttttacaaa gtgatctgat gtgaaacaaa 900
ggtagacagaaa tctagtcttc ctccagacttt cagatttata atcatttttt gttgtttttt 960
taactactag gaccctggaa tagtagcata tcagaatacc atgttgaaag gaagctcagt 1020
cataatagtc tatcctattc atcaccaatc cagactttta agttactaac agtcaccttt 1080
aggagaatt tacaccagac ttttcaagca agttatagca aaaaaaaaaa aaaaaaaaaa 1140
atgtggcggg gcgcgggccc gagagtttaa acaatctgtt ggggcggggc gaggggatga 1200
gaagggcgag cgccaggacc gggggaaagg tgggtcccc aaagcgggc gccggtgaac 1260
caggtgtggt ctggtcacgc tccatcccc cgctccggcg gaagagagga aggaactaag 1320
agaaatag                                     1328

```

<210> 64

<211> 274

<212> DNA

<213> Homo sapiens

<220>

<221> unsure

<222> (19)

<223> a, c, g or t

<220>

<221> unsure

<222> (22)

<223> a, c, g or t

<220>

<221> unsure

<222> (45)

<223> a, c, g or t



&lt;211&gt; 537

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 67

```

aagtctctca ctggttgctg gaacctctgt tggaaatgctg tctttagaag ctgcatttgg 60
attccatata ttcttttttt gagattatat ccccttattt cctaactcta taaaataaat 120
gtgtgattcc aaaacctggg gtttgccagg tatcttctaa gtctataata cgtattttat 180
aataattgttg gtactttgct atttcaggag gacacctata tacctaactat atttatattt 240
gccaatgttg ctttactggt tgcacattaa gtgtgtggca tatttttgtg tttttgagct 300
gggagtcctat ccaacacacc atgttcactt tgggtatacc aaagtattta cgcttcctat 360
atctagggaa cattatacat gcaatagatt gtagtctctg gaagtcgaag cctgtctctat 420
ctttttcacc actgacccca tttataatct agaacagcag ctttttggga tttgagtttt 480
gttgacctgt ctagggtttt ggaggtgcac ttaccatgt tgtattacag gatggat 537

```

&lt;210&gt; 68

&lt;211&gt; 1645

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 68

```

gaccacctcc ccatttcaga ggttggttga ggtggaattt tattttctgt ctcaactcata 60
taactctact acttacttga cagcacttct cttaacaaag aggcgtggat gtttcttttt 120
atgactcacg agggcaacgtt cgacagacaa taccgtttac acacatatgt caaagcaaaag 180
gtggtttccc tgcaacaaaa atcaagactt ccttagttgg gtacgttgtt ctggctcttg 240
gtattaattc agtgtctcct tattatgaca tttcctttaa ggcaacaggc attagcatata 300
atgtgtaaag aatgaaaaaa aacctgactg cccagggggag gcaggaaagga tatcttcgga 360
gggggtggtta tagagaaaaca cagacatttt ggtctctatta gtgtgctaac gctggaaaata 420
acgagaccag aggccttggtt acaggcgaaa gggatatgaa aggcagaaaa ggaagaaaat 480
atateccctc ttttgcaagg tgcagcgatt ccttttagag tcagtagtct tcagctgttc 540
tgtgatctaa ggggtgcagg gtctgtaatc tctcatttgc agggcaaaaa gagaagccct 600
ttaaaaagcc acggatgggt tggtaaacat gagaagggtg ctcttttctt ccccgatgcc 660
ttgttttata gcttcctttg ccattaggaa gatgatcatt gctgtagtac atttatctac 720
atacacttag gagtttagct tgtccagggc agcaaaagccc atcttttcta tgcctcaga 780
tttaaacaaa tttatattga tttttcacca agtactaaga atgattttga catgctgtag 840
ataatcagtc attaatcttg gggaaacattc atatccatgg gcataattat tttcaaaagt 900
aattttatag ggcacaacct gtgcttttgc agttatttga aaacaatttt tgttatcttg 960
ctagttattg ttggtattgt aaaatacacc gaaattctct accgtataat ttttaaatgc 1020
agcatccccg gaaattgagg ttgtaaagag accatttaatt ttgcaaatga ttaaaagtctc 1080
tcactgggtg ctggaacctc tgttggaaat ctgtcttttg aagctgcatt tggattccat 1140
atattctttt tttgagatta tatcccttta tttcctaact ctataaaaata aatgtgtgat 1200
tccaaaacct ggtgtttgccc aggtatcttc taagtctata atacgtattt tataatattg 1260
ttgggtacttt gctatttcag gaggacacct atactctaca ttttatattt tgccaatgtt 1320
gctttactgt ttgcacatta agttgtgggc atatttttgt gtttttgagc tgggagtcga 1380
tcacaacacc catgttcaact ttgggtatac caaagtattt acgcttctca tatctaggga 1440
acattataca tgcaatagat tgtagtctct ggaagtcgaa gccttgccta tctttttcac 1500
cactgacccc attttataatc tagaacagca gcttttttggg atttgagctt tgttgacctg 1560

```

tctagggtttt tggagggtgca ctttaccatg ttgtattaca ggatggatag acagtgagat 1620  
ttacgtgaca aaatagcctg agttt 1645

<210> 69

<211> 164

<212> DNA

<213> Homo sapiens

<400> 69

aaattttata aatggatagc accaaatggt aatgagtgtg tagaacaagt gggatactca 60  
tatactgcta gctagatgtg taaatgtggt aaagtcctt tggaaaaacct tatcagagtt 120  
gtctaattga ggtaaaccta caccctgagcc agcaattgtg ctca 164

<210> 70

<211> 1490

<212> DNA

<213> Homo sapiens

<400> 70

ggtcccgata aaaggatatg aacttgcagt cccccagcat cagcagcttg ctgaaattga 60  
tataaaactc caagaactct ctgcagcctc ccctacaatt tccagttttt ctccaagact 120  
tgaaaatcgg aataatcaga aacctgacca tgatgggtgaa agaaatatgg aagtaactcc 180  
aggagaaaag atacttagga acaccaaaga gcaacgcgat ctgcataatc ggctgagaga 240  
gattgatgaa aagctgaaaa tgatgaagga aaatgtgtta gagtccacat cactctcttc 300  
tgaagaacag ttaaagtgtc ttctggatga atgcatactt aaacaaaaat ccatcattaa 360  
actttcttca gaaagaaaaa aggaagacat tgaggagcta acacctgtgt tccccagct 420  
ttccagggtcc atcatctcta aattgctaaa tgaatcagaa acaaagggtcc agaaaactga 480  
ggtagaagat gcagatatgc ttgagagtga agaattgtgaa gcttctaaag gctactatct 540  
cactaaagcc ttgactggac ataacatgtc agaagctctt gtcactgaag cagagaatat 600  
gaaatgcctt caattttcca aggcgttat tattagtac acaaaagact attttatgtc 660  
gaagactctt ggcattggga gactgaaaag gccctccttc ttagatgatc cactgtatgg 720  
tatcagtggt agcctttcat cagaagacca acatctgaaa ctgattctc cagagaatac 780  
aatagcagat gaggaggaga ctaaaagtgc agcagaagaa tgtaaaagac cctaatacag 840  
gacttgcctg gtgtgctctt cagaaagtgt gtaattgaagt taaattaaat tctctattga 900  
attatttgaa ttcaatgaat gcactgcaga gactattctt tattgatttt gacattttga 960  
gtcgctcttt tggattata tttccttgat atttttgaga ctgggggtga attgttcagt 1020  
ggtttttctt cattaaaatt tctgggacca ttggttataa attttattgt aatcttacag 1080  
tattaggatt cattataaaa accaacattt taatgtatac gtgttagggt aaaactcgtt 1140  
gaagtgtctg gattgtcctg tattcaattt tgtatgttcc acctctactg tgattcagac 1200  
agatcatggt ggctactggg aatttttctt gtggccctgc ttttctctct tccccactgt 1260  
ctcatgtctg tgaaactggt acaacctgcc ataagatgaa atgaattgtc tcaacaaaag 1320  
aatattagaa gagcctttac tatctttattg gtgatgacac gtttcttaag taggagtttg 1380  
agtgaattat ttgatataat accttgttaa ttttaatagt aacaatagtt tcttattttc 1440  
tttcagagtt tgggcctttt agattgcac aaataaaaaa gagctacttt 1490

<210> 71  
 <211> 225  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> unsure  
 <222> (22)  
 <223> a, c, g or t

<400> 71  
 tgtgagccat tgtgtctggc cnagtgactc acttctgaag acagaatata ggggaagtga 60  
 tggatatgtga cttcagagat cagatcataa atggcattgt agcttctgcc ttgttttctc 120  
 tcttgtgtca ttcactctgg ggaaagttag ctgacactcg tgaggatgct caagtggcct 180  
 tgtggagagg cccacgtggt gatgggctga ggctctctcc agcag 225

<210> 72  
 <211> 519  
 <212> DNA  
 <213> Homo sapiens

<400> 72  
 ctcttcagg ctctcttggga cccttccgcg tgcccagcgc tggggagcgc ttcttcaccc 60  
 tgcggactct ggcctctctc cagcctctc ctgggggagg ctgcctgcag tcccaggccc 120  
 agggtagctg gcagggggcc acccccacac ctgcaactgc ctacactgct ggagacccctg 180  
 gcagcatcaa ctccagtaca tctaattaa tttgggggat aagcaggaag gagcgctgcg 240  
 tgagctgcca tgtatgcgca gccgttgctt tgttactgaa cgtgccgcgc acgacctcag 300  
 aaaacccaga tgggtggtgg tgcccatgag ccctgctcc tcagccaggc ccgtggcgcc 360  
 ggctcatgtg tctgctgcga ctcgagatgg cctgaaacgc cactcattct cccacttcag 420  
 ttcgtttttt tgacagtaat tttatggtaa cgctatgaat tgaattgtct gttctaggac 480  
 tgggcacaga ttttccatt aaaatttttg acttatttt 519

<210> 73  
 <211> 1315  
 <212> DNA  
 <213> Homo sapiens

<400> 73  
 aattgccatc ggatgaagcc tgctctgttc agcgtgctct gtgagatcaa ggaaaagaca 60  
 tgggtaagca tccgtggcat tcaagacgaa gatccccctg acgccagct cctgaggctg 120  
 gataacatgc tgctggctga ggcgtgtgc aggcccgaga agagaggaag aggaggagcg 180  
 gtggccaggc ccggcacagc aacaccaggt ggctgtccaa atgacaatag cattgagcac 240  
 tctgactaca gggccaagct gtcccagatc cgacagattt accactctga gctagagaaa 300  
 tatgaacagg cctgtcgtga gttcaccac cagtcacca acctcctcca ggagcagagc 360  
 aggatgaggc ctgtctcccc taaggagatt gagcgcatgg tcggcgccat tcacggcaag 420  
 ttcagcgcca tccagatgca gttgaagcag agcacctgtg aggcagtgat gacctgcgt 480

```

tcgcgggtgc tcgatgccag gcgcaagcgg cggaatttca gcaagcaggc gacggaagtg 540
ctgaatgagt atttttactc ccatctgaac aacccttacc ccagcgaaga agccaaagaa 600
gagctggcca ggaaggcgcg cctcaccatc tcccagggtct ctaactgggtt tggcaacaaa 660
agaatccggt ataaaaagaa catggggaag tttcaagaag aggctaccat ttacacgggt 720
aaaacggctg tggataccac ggaagtggg gtcccaggga accacgcagc ctgcctgtca 780
acacetaget ccggtcctc tggacccttc ccgctgccc ccgctgggga cgccttctc 840
accctgcgga ctctggcctc tctccagcct cctcctgggg gaggtgcct gcagtcccag 900
gcccagggtg gctggcaggg ggccaccccc caacctgcaa ctgcctcacc tgcctggagac 960
cctggcagca tcaactccag tacatctaata agtttggg ggataagcag gaaagagcgc 1020
tgcgtgagct gccatgtate gccagccgtt gctttgttac tgaacgtgcc gccgacgacc 1080
tcagaaaacc cagatgggtg gtggtgcccc tgagccctg ctccctcagcc aggcccgctg 1140
cgccggctca tgtgtctgct gcgactcgag atggcctgaa acgccaactca ttctcccat 1200
tcagttcgtt tttttgacag taattttatg gtaacgctat gaattgaatt gtctgttcta 1260
ggactgggca cagattttcc cattaataatt ttgacttat tttaaaaaaa aaaaa 1315

```

```

<210> 74
<211> 435
<212> DNA
<213> Homo sapiens

```

```

<220>
<221> unsure
<222> (324)
<223> a, c, g or t

```

```

<220>
<221> unsure
<222> (355)
<223> a, c, g or t

```

```

<220>
<221> unsure
<222> (370)..(371)
<223> a, c, g or t

```

```

<220>
<221> unsure
<222> (385)
<223> a, c, g or t

```

```

<220>
<221> unsure
<222> (393)
<223> a, c, g or t

```

```

<220>
<221> unsure

```



```
gggcatacat ccggacagga tccacctcta gggctgggga tggcttagct ccagctatgc 540
catatgacta tgtgtagaag aaaaaaagga aagtgggttac ctgggggaga agtagaggaa 600
caaatgctgg gtaagaaact aatagcacca ttaaaatggg gccattgtac ttcattgtgt 660
tattcttttt attctctaaa taaaacaaat tctgaatata aaaa 704
```

```
<210> 76
<211> 539
<212> DNA
<213> Homo sapiens
```

```
<220>
<221> unsure
<222> (527)
<223> a, c, g or t
```

```
<400> 76
tacaagggat gtgaaggatc tcttcaagga agtcactttc tgtattgtac ttcgcttaat 60
acttaagcct ccaggaaaagt tttgttagat attgcagtcg ggtctaggct aagtatttta 120
aattttttat ttttatttta tttgggtaaa agcgggtgtc tgatcagtga cagaagtgc 180
tggggtcacc ctttaacaga acgttgggtg agagcaaatc agcacaatct tctcctctat 240
gaacatgtgt gttgactcat gcataactca gaaaccctgt gaagcagcct tgaaaagaga 300
tttttctggc caaggtgata agcaaatact tgtatagatg ttatgactgt gcaaatgggt 360
tgcaaggaga cctcagaaat gacttgcaga agagaatttt gaaaaaaaaa tttaattggc 420
tcgaacacaa tagaaagcca gtcattaatt gtaataaact tctagtgttg atactctaag 480
gtatgagcat acctcagaat taggaccagt tcatattata ctaaaanata aatattgtc 539
```

```
<210> 77
<211> 592
<212> DNA
<213> Homo sapiens
```

```
<400> 77
cgctatcccg caacccccgt ggtgacaggg tgggagtcct gtaacctgtc acaccagcat 60
gtgagggcca catgccccac gaggggggtg atctaaggct gagtttgggc agagaggcca 120
aaaaaagggt ccaggcagct cacggacaga ggtgctcgtg ccacacagaa ttctcagttc 180
tgggaatttt tgtcaccaaa attgctgagg actcgggcag ctacgtcgcc tgtaccaggg 240
gtgcgcctgc cccaacagtg cctgctgggc cccttaaatc cgccagcctc ctagctgagc 300
catcagtggc tccttgggtg cctcgcaggt ctctgatct ggagagtcct tgatttagga 360
gcctcggttc caaccccagc cctgcttctg ggaggctctc ctgagcctca gtcacctcag 420
gggtgtggct gctgggtctt cgtggcggtg agggacaagt cggagtgcag ggggtcaagg 480
acaggagggt gctggctgta gcaataatcg gaaaaatgac agtggctcgg agcagagtgg 540
tgggtgggtgga ggagaggggt gggcattggt atctcgaatg aaacagctct gt 592
```

```
<210> 78
<211> 603
```



<212> DNA

<213> Homo sapiens

<400> 78

```
ctgagatgct ccgcatcccg caacccccgt ggtgacaggg tgggagtcct gtaacctgtc 60
acaccagcat gtgagggcca catgccccac gaggggggtg atetaaggct gagtttgggc 120
agagaggcca aaaaaaagggt gccaggcagc tcacggacag aggtgctcgt gccacacaga 180
attctcagtt ctgggaattt ttgtcaccaa aattgctgag gactcgggca gctacgtcgt 240
ctgtaccagg ggtgcgcctg ccccaacagt gcctgctggg ccccttaaat ccgccagcct 300
cctagctgag ccatcagtggt ctctcttggtg gcctcgcagg tctcctgacg tggcagagtc 360
ttgatttagg agcctcgggt ccaacccccag cctctgctctt gggaggtctct cctgagcctc 420
agtccctcca ggggtgtggc tgctgggtct tcgtggcggt aagggacaag tcggagtgcg 480
gggggtcaag gacaggagggt ggctggctgt agcaataatc ggaaaaatga cagtggctcg 540
gagcagagtg gtggtgggtgg aggagagggg tgggcattgt tatctcgaat gaaaacagtc 600
tgt 603
```

<210> 79

<211> 133

<212> DNA

<213> Homo sapiens

<400> 79

```
agtttctctt gttgggttat tttaatttgg acctgggtat catttttcag ccatatttaa 60
ctttgtacat atcagaatgt tctgataaaa cttaactttt attaaagtgt ttgtgatata 120
agcataaaaa aaa 133
```

<210> 80

<211> 349

<212> DNA

<213> Homo sapiens

<400> 80

```
aaatagaaag tgacagcaat tcttttctta tgcaaaaccca cactggaaaa gaaaaataact 60
ggcattgcaa aagataatgt gtacccaaac tagcagatta tatcacaac actttaataa 120
aagttaagtt ttatcagaac attctgatat gtacaaaagt aaatatggct gaaaaatgat 180
aaccaggctc aaattaaaaa aacccaacaa aggaaaacttt ttttttttta agacacaagg 240
tctcattctg ttgcctaggc tggagtgtag tggcatgact acagctcact gtgacctcaa 300
actcctgggc tcaacaatc ctcttgcttc agccccctga gcagcagct 349
```

<210> 81

<211> 959

<212> DNA

<213> Homo sapiens

<220>



<210> 83  
 <211> 844  
 <212> DNA  
 <213> Homo sapiens

<400> 83  
 acactctggc tcagttttct catctgtaaa atgagacatc ccctcattgt gtggcctggc 60  
 ctgtctccag ggagcgcccg ccgagtgcctg ctgggttggg cagtttttct gcccagtgcc 120  
 tctgatgggg gctcagagcc ctggcctccc ctgggaggac acgctgtgca gccaggacag 180  
 ctgccgggag tgtgccagg tcaactgtat ggccttcgca gggtgactgg cagggtatcaa 240  
 atcagcccat gaagggaagt ggtgattttc cttttttgta gctaaattgg gcaggctctt 300  
 gggaagtaga aagtctctgt gtttttgctg gtgaagggtt tgactgtgga gctcttctaa 360  
 caccatcatc agtgtctgtt tctctgcatt ggctgtctgc cctgttggtg gagctctggg 420  
 ggagagagcc aggcgcgcgt ccagtggcgc ccgtgcgca ccagctgctt gctgtttaca 480  
 cccagggtgcg ccgagttctt ttcatacagc acagcaaatg ataataagcta gtgacaattg 540  
 gtctctctgt cactcgtgaa aatgcaggga ggacaactgc atgcttagat ctgtttcttt 600  
 tttcagacat tcaaatgttc taatatctga agctaactt ttgtaggata taggatgtctg 660  
 attatgtgaa caattagtc tgggttttct gtactgctat gaatatgtct gatttcaagt 720  
 tttygtcaaa tatctcaaat gcaagggtgaa agtgctcttg tctctatgct tctaaaatcg 780  
 ctcatgctta gttgtgggat ggatgtcttc cgcagtgtat catcaataaa atttctactgt 840  
 tttc 844

<210> 84  
 <211> 3180  
 <212> DNA  
 <213> Homo sapiens

<400> 84  
 aaaaattacg cgaagatgct aagataccag cttgtgaaga aagcctaagc cagaccccg 60  
 cgagggtgac agggaccagt cctgctcaag accaggatca tccatccgag gagcaggggg 120  
 ggaggggttc ctgtagagag ccaggtgtta acccctgcct ctcccgctca ggacgcctcc 180  
 agcagaagat gctgcttgcc tgcagagccc ccagcctgag gacacgggtg cagaaggagg 240  
 ggctgagtc aagacgagct cagaaaacca gaagcctgaa actttatctg gaaacactga 300  
 aggtgccttc attagcagaa ctgcacagcc gcctctgaaa aggtacgtcc actcggcatg 360  
 gaggagtcgc cgtcccttac ccagttaata agatcaatga atgcccaggt ctctcttctt 420  
 ctacgttcca cccacaaaata aaatggttcc aaaaagaaga tgtcgtcatc ttaaaagataa 480  
 gaataaggaa tgtaaaggac tacaagtgtc agtattttaag ggatagatgc gttttcagtg 540  
 ctgggtggg agacaaaatt tacctggctg atctggagct gcggggcaca ataaggaaaag 600  
 atgactgcca atgtgtgatt agaaacgatg aacctgtaat cactctggcc aaagagagaa 660  
 gggagggcat gtgtcacccta ctacagacaga ggaaccccaa cgtggctttt gatatttgatc 720  
 actgggaaga ctgtgaagag gacagccact tcccgaagg agtgaattct aaaaacctgc 780  
 cgtacacagt gacagagggt gttgaagaca gtacgagcac ttcagaggat gacgacagt 840  
 agagtgaag agaaagtgaa tgactgtctc aagagcggct ggaagatgtt gaacaaaaat 900  
 ggatattgcc atgtgacgca cagttaagaa aacagtcagt cataaccaa tcttttctt 960  
 ttttttttct tttttttttt tttttttttt tttgagacag agtcttgctc tgtcggccag 1020  
 gctggagtg agtggcatga tcttggtcca ctgcaacctc tgcctcacag gctcaagcaa 1080

```

ttctcctgcc tcagcctccc gagtagctgg gattacaggc atgtgccacc atgcctgacc 1140
aatttttgta ttttttagtag agacagggtt tcaccatggt ggacaggctg gtctcgaaact 1200
cctgacctca ggtaatcctc ccacctcagc ctcccaaggt gctgggattt caggtgtgag 1260
ccaccacacc cggccaacca aatctttctt tacctcaagg ataaatgatt actgtcacct 1320
tgtgggtgctg gacttgataa cggtgagaaa ttcttcattg acttaaaaat agggctgata 1380
taagaccatc aaaggagggt ggacacagag aaacagcagg tgtgtctctga ttccgccggc 1440
ttgtctgtcc ttgtctggcg ctctcgccac tcacctgggc agagcagaca tgcattctggg 1500
tgatgaaatg cactgtctgg agtcagtcga ttcatTTTT ttcaactaga cctttgtcac 1560
atgtctacaa acctgatctt acacataata attgaggttt ctaatgtaca cacttagact 1620
cagcaactgt tgaaccagcc ctctcaacca tgagatagtg ggatttaaca taaccatcta 1680
tgtgaattga tagtgttagc attcttggtt agtgatagct cctcagatga agttgacttc 1740
tgatgaagag atagtccagg gatagaaatt ggattgctca gtaagaccga ggcctttccg 1800
gggtgaagct gctggttcta aacaatccct tggacctgca gagtctctgag caaatggcac 1860
aaaggttgct ttttagtgga aattcacaaag ggcctgtggg gtgctctggg gtgactcttg 1920
aatgcctaca tgcgtgagc cctgcagaca ttccgccccc catctgcaat gtggctgcag 1980
cactgggggg ggctcaccag tttaggggag gagtgtatgt agtcatggcc acaccacagag 2040
gctgggcttt gtgctttggg ttcttttggt gactgaaaaa gcgagaaaag tgagctattg 2100
ggaaaattaaa agtctgtgtc actctgtgtc ttgtttatca gctttgcttc ggaatggaaa 2160
agaatttgga tagaacaata gtgttgtgtg acggcccccga gatctttatt atttttttgt 2220
atcagaaaag gccaatgccc aggcctatgt atgtccagc agaagccacc gcttgtaacta 2280
gaggtgaaat ttgtcatcaa gctgtcctgt gagcaggctc ggatcacact ctgggctcag 2340
ttctcatctc gtaaaaagag acatcccctc attgtgtggc ctggccttgt ctcaggggagc 2400
gccgcgcgag tgcgtctggg ttgggcagtt ttcttgccca gtggctctga tgggggctca 2460
gagccctggc ctcccctggg aggcacacgt gtgcagccag gacagctgcc gggagtgtgc 2520
ccaggctcact gctatggcct tcgcagggtg actggcaggt atcaaatcag cccatgaagg 2580
aagatgggtga ttttcttttt ttgtagctaa attgggcagg ctcttgggaa gtgaaaagtt 2640
ctgggtgttt ttgtgggtgaa ggttttgact gtggagctct tctaaccacc atatcagtgt 2700
ctgtttctct gcatgtggct gctgccctgt tgggtggagct ctggggggcag agaccaggcc 2760
gcggtccagt ggcgccccgt gcgcaccagc tgccctgctgt ttacaccagc gtgcgcccag 2820
tctctttcat acagcacagc aaatgataat agctagtgc aatgtgtttc ctgtgcactc 2880
gtgaaaaatgc agggaggaca actgcatgct tagatctggt tcttttttca gacattcaaa 2940
tgttcttaata tctgaagcta acattttgta ggatatagga tgctgattat gtgaacaatt 3000
agtcattgggt tttctgtact gctatgaata tgtctgattt caagtttttg tcaaatatct 3060
aaaatgaag gtgaaagtgc ctttgtctct atgtctctaa aatcgctcat gcttagttgt 3120
ggtatggatg tcttcgcgag tgtatcatca ataaaatttc actgttttca cagaaaaaaa 3180

```

&lt;210&gt; 85

&lt;211&gt; 996

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 85

```

atctaagtgt tggagtaaat gaaaaacaga taacacatca atgatacttt cagtcttaat 60
tttcaggtaa aaaaatccaa attaggaataa tgtggaactc agtgccatc acctaaagtc 120
aacttacttt ttgaaaagtt tataacattt tctcaattg actaaaaggt aatattagga 180
ccacaagatg aggacaaata tccagaaaat atggcgtgaa aatattata aattttcttt 240
cttcttactt tgaccecaaga tctaaagcac cagccataaa cattttgaaa gaccttttgt 300

```

```

tcttaaagct gttacttcac agccatataa ccaagtgttg gttctgtgca cttggtttgt 360
tgattttaagt caccatata gaatactgag tagaaacata ccagtcctatg atagactaag 420
ttgattgttt ttgctggcag atgtgagaga gcatcattgc tcattatatg gttggcttaa 480
ttgggttttc tcctggaata cgtggatggc gttcttttaa tctgttacac agagtactta 540
aaatcaaagc ctctgaatta ttgtttaatt gttagtatat tttagatcat ggttacattc 600
tgggattggt ttatgtctaaa acacttggtt gtcctttaca cagggattaa catggggccg 660
aaaaagggtca tttctgttgtt tttcaagcat tagccacttg ttattagtaa aatggtgaag 720
tgagagttca ctgattttta aaaccaaata ctgtaatagg acacagaatt taataagaat 780
attatctctt tggagcatga tttttgttgt catgttatat acagtagaaa ggtcaaatga 840
tggatgtgac tattacaat agcagtgatt tatgatgggg tatctgcaaa ataggccttg 900
ctttgagaaa aaaaaatcaa aatctgtgtt ttaaagtagc attaatatatt ttgttctgta 960
actagaaaat gaataaacia tgtttgtttg cgaagg

```

```

<210> 86
<211> 523
<212> DNA
<213> Homo sapiens

```

```

<220>
<221> unsure
<222> (257)
<223> a, c, g or t

```

```

<220>
<221> unsure
<222> (270)
<223> a, c, g or t

```

```

<220>
<221> unsure
<222> (272)
<223> a, c, g or t

```

```

<400> 86
gctagttttt ggaggagcca agacttggac cccagtcctt ttgaccacct atctggagtt 60
ttatttttgtt tttccctcta aaagtgaata attcctgtag ttttcaggtc tgctgcaaat 120
gaaagagggg agcctgggga ggctgggtta caaaacttcaa aaactccacc aaccacacc 180
aagctctagt cctgtagta gtaacaatat tactggcttt ctgtgcgtca agacattttt 240
ctaagcactt tacatgnaat gcctcattcn tncttcacaa ccacctgtgt tatttttatt 300
cctccatttt acaaaaaagg aagctgcagt ttcgagtggt tgatactttg cccaaagtca 360
tatagctaat aaggatagat ctatatactta aaccaggcca gataacaaag cctatacaact 420
taacctctta agaatacataa ttccaaattg tatttcttta gtcagtttac agtagaagaa 480
atcattccag ggactgtgct attggtaggt gatttttttt tgt 523

```

```

<210> 87
<211> 390

```

<212> DNA  
 <213> Homo sapiens

<220>  
 <221> unsure  
 <222> (122)..(251)  
 <223> a, c, g or t

<220>  
 <221> unsure  
 <222> (333)..(334)  
 <223> a, c, g or t

<220>  
 <221> unsure  
 <222> (338)  
 <223> a, c, g or t

<220>  
 <221> unsure  
 <222> (343)  
 <223> a, c, g or t

<220>  
 <221> unsure  
 <222> (348)  
 <223> a, c, g or t

<220>  
 <221> unsure  
 <222> (365)  
 <223> a, c, g or t

<220>  
 <221> unsure  
 <222> (381)  
 <223> a, c, g or t

<400> 87  
 gttgaccttt ggatcacagc tagtagtggt ttgaggacag aatgtatcaa tgtatcaata 60  
 gtttctgtct tgtcttcacc gctgagtagg tatacaaaac ttagtcaagt caaatcactt 120  
 cnnnnnnnnnn nnnnnnnnnnn nnnnnnnnnnn nnnnnnnnnnn nnnnnnnnnnn nnnnnnnnnnn 180  
 nnnnnnnnnnn nnnnnnnnnnn nnnnnnnnnnn nnnnnnnnnnn nnnnnnnnnnn nnnnnnnnnnn 240  
 nnnnnnnnnnn ntcactctctt tacctcagtt ttctcctctt caaaatggag ataatgccta 300  
 ccttacaat tgatggtag aattaaatga ggnnatgngt gcnaaaangt gtgtgtatgc 360  
 ctggnacctc tttggcatgc nacttttgtt 390

```
<210> 88
<211> 900
<212> DNA
<213> Homo sapiens
```

400> 88									
aattttgtgca	ttttatatct	ctgaagagca	cactgctagc	aacctgattg	taaatgacca	60			
gaaggactta	tatccaacct	atgtgactta	aacatacact	taagtactct	aaaccactat	120			
ataaaaaata	ctcttagaga	gattctgaaa	ttctaattgt	gttgacattt	ctggtaatat	180			
attttttgaa	aacctatttg	atatttcttt	cattataact	tattggtact	gtatcactaa	240			
gttaattgtc	taaaaggtaa	ctgatttctt	caaaccttcc	agtattaata	atttttaagc	300			
caattttgaa	ctgaggctta	aaatcactga	atgcttatgt	cgttgactact	actcctttct	360			
gaatgatgca	gtattttaaa	aaatggattt	ctcatataaa	taatatattc	aaaaaggagt	420			
ttctcatata	aataaattaa	tcaaaaaagc	tgaattttaa	agttttctcc	aaagtcttat	480			
ttcagtaatt	atagagacct	aggttaattg	tggcagatat	atctgccttt	cagatatgcc	540			
gtaatgtgaa	aaatacacaca	gcctatgtat	tttttttaat	aactaaaact	gtgtgttttt	600			
tattttggag	tagttctcat	aattcatttg	tagggaacta	tcagattttt	atatctctat	660			
gtatgtatat	gacttatatt	ttaggctctg	gtattcctaa	aagatttggg	tgtgtgtgatt	720			
tcctttaact	gacgtaaaca	tgtatcacaa	acatatattt	taattccaat	taaaggggtg	780			
ctttggcgca	tgctgaaatt	tgggaatttt	ttcttttgat	ttgataaatt	tatcaaaaag	840			
atttggaaac	aatctttaatt	agggtaagtt	gtttttgaaa	gtaaaagtgaa	ctgttttaatt	900			

```
<210> 89
<211> 1173
<212> DNA
<213> Homo sapiens
```

```
<220>
<221> unsure
<222> (1030)..(1053)
<223> a, c, g or t
```

<400>	89					
agattcggca	cgagcatttt	cactaaatttg	tgcattttaa	atctctgaag	agcacactgc	60
tagcaacctg	attgtaaatg	accagaaggga	cttatatcca	acctagtgtg	cttaaacata	120
cacttaagta	ctctaaacca	ctattttaaaa	aataacttcta	gagagatttc	gaaatcttaa	180
tttgggttga	ctttctcgta	atatattttt	tgaaaaaact	tttgtatatt	ctttcatata	240
acattattgg	acttgtcata	ctaagtttaat	tgctcaaaag	gtaactgatt	tcatacaacc	300
ttccagttat	aataattttt	aagccatttt	gaaactgagg	cctaaaaatac	tgaaatgctt	360
atgtctgtgt	acttacctct	tctctgaatg	atcagatttt	taaaaaatgg	atcttccata	420
taaaataat	tactcaaaaa	ggattttctca	taaaaataat	attatcaaaa	aagctgattt	480
taaaaagttc	tcccaaagtc	ttattctagt	aattatagag	acctaggtaa	tgagtggcag	540
atatatctgc	cttccagata	tgcccgaatg	tgaaaaataa	cacagctatg	tgatattctt	600
tattaactaa	aactctgtgt	tttttatttt	ggagtagtct	tcataattca	ttggtaggga	660
actatccagt	atttatattc	ctatgtatgt	atcatcagat	aattttgagg	cttgggtattc	720
ctaaaagatt	tgagttgtgt	tattctctta	acttgacgtg	aacatgatct	acaacacat	780
cttttaattc	caattaaagg	gatgcttttg	cacatcgtgc	aatctggagc	tttttttttt	840

```

gactttgata aatttatcaa aaagattgga accaaatggt aattagggta agttgtcttt 900
gaaagtaaag tgaactgttt tatttaattg aattgtgtgt tttttgtttg ttgtcgtttg 960
tttttacagt gtgcttaagt aagtttaatt cagcttaatt acatcagttt aaaagatctt 1020
gaagctttcn nnnnnnnnnn nnnnnnnnnn nnnttctgaa ggaagatttc cattaggttaa 1080
tttgtttaat cagtgcgaagc gaaattaagg gaaaatggat gtagaaaatg agcagatact 1140
gaatgtaaac cctgcaggta agtaaggata tcc 1173

```

```

<210> 90
<211> 231
<212> DNA
<213> Homo sapiens

```

```

<400> 90
attataggca tgaaccacgc tgtccggcca tatattttcg tcttttgaag actgttatat 60
acatgaaatt atatggtatg tagcattttg agagcgactt cttttgctat gcataataca 120
tttgagattc atccatattt ctcagtatat taatagttct tatttctgag tcactccatt 180
gtgtggattt actactgttt gttcccccag tgaaggatgt ttaggatctt t 231

```

```

<210> 91
<211> 2518
<212> DNA
<213> Homo sapiens

```

```

<220>
<221> unsure
<222> (2502)
<223> a, c, g or t

```

```

<220>
<221> unsure
<222> (2508)
<223> a, c, g or t

```

```

<400> 91
taccctaagt atcactcccc gagccccatt cacttatatg catttagtaa atgcacttgc 60
ttttagcaag tttctggatg gccccttaac atctgactcc tgtgagcatt tgggtggctc 120
agcgtgaact gcagcatatg aagtgcattc aggtcgggca tgggtggctca tgccctgtgat 180
tccagcactt tgggaggcca aggtgggcgg attacttgag gtcaggagtt tgagaccagc 240
ctggccaaca tgggtcaatcc catctctact aaaaatacaa aaattagcca gacttggtgg 300
tgggcgcctg taatcccagc tactcaggag gctgaggcag gagaatcact tgaacctggg 360
aggcagaggt tgcagtgagc ccagacggca ccattgcact ctagccctgg gcaacaacac 420
gaaactccgt cccaaaaaaa aaaaaaaaaa aaaaatccca aggggctgca gctgccaac 480
ccaataccct ctatttaacc cctactctgt tttaacaagag aaataaaaga agtatcagca 540
gagctcaggt gctaaccact gttgagggct gacctacaaa actctgccta caaaactctc 600
ttagacaggt gaatatgcca ctagaagtta ggttgctggt agacctgggg gtccctgcgg 660
gaggggtgat gtttctttac caccceacag gagatttcag tggcaaggca tgccctgcag 720

```







&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 94

```

ctgcttaaca gattcaacag aagagtggca ggctcagctg ggtgagcaag gtatcccagc 60
gacggggggac acgccccaga ccatgggtgg tggggcttct cagaggagggt ggcaggagac 120
ccgagcctgc caaggttgca catttgtgtt ttatttgagg gcgagtttgg acggcaagac 180
tgatggagat tgtggtctaa atgcctctaa cccactcctt aaaatgacca ccggatgttc 240
cacaagtact tgaatatgaa tgaatggctt cccgagaggc agaaggcagg ggtgtgccct 300
accccacgcc ggccaagagt tcaacaagca ttggttgaca agtgaatagt gaggacctga 360
acccagtcac aattcaagat gagggctctg ccatgacgca tgtggtctgt gtcacctctg 420
agtctccctg agcagtgctt gaggttcgag tgggacccta cattcgtgaa gagatttatt 480
atctcccccag gcaaaaataac agattctgtc ctagggtgtt tgatgtaaca atggtacgga 540
tcacagccat aacttacaat tattgcatac ttacgacgag tcccgcactg ggctaagtgt 600
ttttaacta tgtgaaatgt ttctttctct g 631

```

&lt;210&gt; 95

&lt;211&gt; 1123

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 95

```

gggatttaca gcaatttctg aagtcttttc attttttccc cctgaatcac atccataata 60
ggatttgaat ttgataaact gctgaaggtt cctggccctg agtcccagtg tcttcccagc 120
ccccgccag ctgtgggtgt gcatggggag cgttacgagg gagggtaaaa tggggccctt 180
ggacgccgcg tgacagagcg agatgaatgg ccgaaaccc tcgcgctgct ctgcgccctt 240
cgtcatccag tcgggggtgt tagggactgt cagagaaaaa taatttagcg gccatggctc 300
taactgatgt gctgcactct ggggtcaaat gacttttaca aagtagtagt gctgcctggg 360
ttctccatcg tgagagctca gggctgacaa catgaaagaa aaaggcactg cagccagaat 420
tcactgacat tcttcacatt tcacatgagt gggacgcagg aggggggctg gggagggtg 480
aggggatgtt cctgcttaac agattcaaca gaagagtggc aggcctcagct gggtagcaaa 540
ggatctccag cgcacggggg acacgcccc aacatgggtt ggtggggctt ctacaggagg 600
gtggcaggag acccgagcct gccaaaggtt cacattgtgt ttttatttga gggcgagttt 660
ggacggcaag actgatggag atttggtctt aaatgcctct aacccactcc ttaaaatgac 720
caccggatgt tccacaagta cttgaaaatg aatgaatggc ttcccagagag gcagaaggca 780
ggggtgtgct ctacccccag ccggccaaga gttcaacaag cattggttga caagtgaata 840
gtgagcactt gaaccacgtc acaattcaag atgagggctc tgccatgacg catgtggctt 900
gtgtcaccct gcagctctcc tgagcagtgt ctgaggttgc agtgggaccc tacattcgtg 960
aagagattta tcatctcccc aggcataata acagattctg tctcaggtgt tgtgatgtaa 1020
caatggtagc gatcacagcc ataacttaca attattgcac acttacgacg agtcccgcac 1080
tggtgtaagt gtttttttaac tatgtgaaat gtttctttcc ttg 1123

```

&lt;210&gt; 96

&lt;211&gt; 516

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 96

actgtgccc gccagtatat actagaattt taaaaaatct tgtgtgtttc ttatgattag 60  
 agcatctgtc tattggcatt tgacaaagta actgacgttt agtttcaatc tgttaataag 120  
 tactttctgc ctatcaaac tggttttttac cttttctctgt cttttctctgc cttcttttag 180  
 atgcttattt tttatgtttg ttctgctgtt ctaacttggg agttacttaa acatgaactc 240  
 ttactatca aaatctaata ttatttgata ctttctctct ctctgggata ctctgttgag 300  
 ctcattttta ttcacattgt cattattgca ttgttttaac tctgtctgta ttttatcttg 360  
 acagggttaa tttgtatttt caatagccat ttagatttac ccacaaaatt tatccttttc 420  
 atttctaac tagatctccc atcttgtaac attttctctt gcccgaaaga caccctttat 480  
 gcttcccacc tttttgtgaa cttctagtag tgaatt 516

&lt;210&gt; 97

&lt;211&gt; 1373

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 97

taaaaaaaaa gaaaaagaaa aacaagaaaa ataggaaagg atgtcagttc gctctcaagg 60  
 tccagggttc tgtggctgag gactgaaggc cttatctcgg gctgatttca aactacagtc 120  
 atgcattgct tgctgatttc atcatggtgc aaacaacaca aatcttgatg gtttagccta 180  
 ctacacacct aggcataatg gtatagccta ttgcttcgct cctaggctac aaacctgtat 240  
 agcatgtgac tgtactgaat accataggca actataacac aatgggtatt gtgcatctaa 300  
 atacatctaa acatagaaaa ggtacagtaa aaacagcgta aaaaaagatt tttaaaatgg 360  
 cgcagctgtg tagaacactt accatgcatg gagtttgag gattggaagt tgctctgggt 420  
 gagtgagtgg tgagtgaatg tgaaggccta ggacattatt gtgactgat ttagactgg 480  
 gtgatgaac actgtacagt taggctacac taaatttata gaaaaatttt cttcaataat 540  
 aaattaaccc tagcttactc tcccctaacc cccaattctt caatccagtc ttggctggct 600  
 gacagtgcag acagcgaaga cacttttttg cttggcagtc tgggtattga gaaaccgtgt 660  
 gagctttttt actttatgaa gttcataatt tttaaatttc ttgactctta tagtacttag 720  
 cttaaaacac aaacacattg tacagatgta tagaaatact ttcttctctg tattttgtaa 780  
 gccttttcta ttttaaaaaa ttattacttt tgtttttact ttttaaacct ttgggtaaaa 840  
 actaagatc ttgagccact gtgcccagcc agtatatact agaattttta aaaatcttgt 900  
 tgtgttctta tgattagac atctgtctat tggcatttga caaagtaact gacgtttagt 960  
 ttcaatctgt taataagtac ttctgccta tcaaacctgt tttttacct ttctgtctct 1020  
 ttcttgctct cttttgatg cttatttttt atgtttgttc tgctgttcta acttgggaagt 1080  
 tacttaaac tgaatctttt actatcaaaa tctaataatta ttgtactt tctctctctc 1140  
 ctggatactc tgttgagctc atttttatct acattgtcat tattgcattg ttttaattct 1200  
 gtctgtattt tatcttgaca ggttttaatt gtattttcaa tagcctatta gatttaccac 1260  
 caaaatttat ctttttcat ttctaactag atcctccatc ttgtaacatt ttcttctgctc 1320  
 cgaagaacac cttttatgct tcccaccttt tgtgtaacct ctagttagta att 1373

&lt;210&gt; 98

&lt;211&gt; 632

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

<220>  
 <221> unsure  
 <222> (496)  
 <223> a, c, g or t

<220>  
 <221> unsure  
 <222> (595)  
 <223> a, c, g or t

<220>  
 <221> unsure  
 <222> (601)  
 <223> a, c, g or t

<220>  
 <221> unsure  
 <222> (623)  
 <223> a, c, g or t

<400> 98  
 ggccaaagca tagtctctca gaaatgcttc tgttttctgc aatgttttct gtttgcataag 60  
 aaagaggagg caaaaagtta aagaaaaata tgcagatcaa tgtaagcaac tcatgttttt 120  
 tttttagata gctttttatg tggcttggaa gtataaagat gtgaaaaaat agttgaaggt 180  
 taattttttc ttttaagggtga ctaattttaac ttgggaatga taaatctcaa gggcaatgaa 240  
 tatattggga gtgggatctg aatgtatcag aagattcaac aaagcagttt ggggtataaa 300  
 tataaaaagc aagggtttta ttcttatttt aagaagtgtg aaatacactc ctactctaag 360  
 gtaatgtcaa attagctata actattaagt gcagggtttgt ttcattatta tgttatattt 420  
 tagtgactta aaggatgaca gaggaggcag aagaagatga accagacttg ggaatctatcc 480  
 tggacacata ttgtanttat atagctactt aatttaaaaa aatttcttaa aatttatagt 540  
 cattcctaatt cttagattga tatgaaaact gttgttttca ctcacagtgg ttcncatat 600  
 natcacaata cagttaacca ttntcgttat at 632

<210> 99  
 <211> 1142  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> unsure  
 <222> (929)  
 <223> a, c, g or t

<220>  
 <221> unsure  
 <222> (934)

<223> a, c, g or t

<220>

<221> unsure

<222> (968)

<223> a, c, g or t

<400> 99

```

cttaaaatag tttagagctt ggaaagtgtt tcacattcaa ctgccagttt ttcagaagat 60
gaaatggagg tgaagagaaa ggttacatga ctcggaagtc catcagtcct actgagagta 120
atggggaggg agccagggtc gaatctccca tctttgaaca ccaggaatag tactttttat 180
ttgtctatgg aaagagggtg tccttgcttc tctgtgtgga tgagcaaat atagttgcta 240
tgaatttcta ttttggaact gaatttccac caagttcaat ttttagaagt atgcattact 300
atgtacctaa tagttttttt agcatgtaca atctgccaac ttccttaca cattgataaa 360
agtagaatac acatataaag caactcaaac ttagaactg accaataaaa gagacactat 420
ttattttctt ttttttttcc agaacatttc aaaaacttcc catactgttt ttctgttagc 480
ttaagcggtg ttaaactcct cactttcaca cctactgtca agaaccctaa tttggctgaa 540
gcagcttaag tgattcagtt cacttcaaac aacatttcac aggatttcta ccccaaaagc 600
aactctttac tatccagtac ataagactct agaacattaa aattctttat atagtccat 660
gtggcatcta aaataacttt ggcctaggaaa taaaacatat ttgcagaaaag tttggggtg 720
aaatcaaaga atggatcaaa gtggcccttc atttggctcc acgtcatctc acaatatgta 780
aatacagcag aatgtcacta aactaccata aaactaaggg gagagacttt gcaaaaacag 840
ggagtgcacg acacgttttt tgctcctgtt ttaaagttaa ttgtactaat gacaacaata 900
gtgatctttt ataggcccaa gttggatcng tgancaattt atagcatttc tgtttcaaat 960
attcaaaangc aaaaagtaat ctgccaatta gaaaacaaaa aacttcaaac ttaagtgtat 1020
taatgatgga gcacctgtat ttgactagat gttatataca tgccattgaa agacatagta 1080
cctaactctgc ctaatgtcta taaactggtg caaataaaag acatttaaac catgaaaaaa 1140
aa 1142

```

<210> 100

<211> 229

<212> DNA

<213> Homo sapiens

<400> 100

```

gtatctcaac aataaaacca agaagaaaca aagccttttt acttggttaga atgtattaa 60
tagtatttta aagaaacttt atagttgtga cattgaaaga ctgttggggt ggggggagga 120
aaatttttac tttccattct aatgtaacct tatgctattc tgtattttta ctgtatattg 180
cttttacaat aaatataaaa tgaaatgttt atgttgacat ttcagtgtg 229

```

<210> 101

<211> 1382

<212> DNA

<213> Homo sapiens

<400> 101

```

ttgaagggtg  atatacataag  gcatagaagt  gtgtggctgg  tgtaaatata  gcttttcaggc  60
tgcgtgagga  actaaggaag  gcctactaga  ctattttatg  ggaagaactg  gattttgtggt  120
taaccagagt  cctaagatgt  gcaagggtcag  tgtgtgaact  atgctggagt  gtgatgtgaa  180
gcagagatca  agaaattagt  acaacagaga  tgttttactg  ttgtacttcc  catcagttaa  240
ggatgggaaa  ggggttttat  tacataccag  acactatgat  tacatctcat  ttttgtacct  300
tatgaaatat  ctatgtctac  tttatgcatg  aagaaactga  tgttcatcaa  gtttttagtag  360
cctatccagc  actacagtgc  tagtaattga  gttaagccag  tgacttgcag  agctaggatt  420
aaaaacctata  tattaggccg  ggattacagg  cgtgagccac  cacactcagc  cagaaaaatcg  480
tttttaaggg  ttctttttaga  ctatatccag  aaaaagttag  ttactaaatt  tttttttcta  540
gacagagtct  tgctctgtta  cccaggctgg  agtgtagtgg  tgccatctca  gctcactgca  600
acctccacct  ccggggttca  agcaattctc  ctgcctcagc  ctcttgagta  gctggcactg  660
taggcagtga  ccaccatgcc  cagctaattt  ttatattttt  agtagagatg  ggggtttgccc  720
atattggcca  ggctggtctc  aaactcctga  actcaagtga  taacaccac  ctggcctcc  780
caaatgtctg  ggattacagg  tgtgagccac  cacactgggc  caatgcttaa  tatttttaatg  840
tatctcaaca  ataaaaacca  gaagaaacaa  agccttttga  ctgttagaaa  tgtattaagt  900
agtattttaa  agaaaacttta  tagttgtgac  attgaaagac  tgttgggggtg  gggggaggaa  960
aatttttact  ttccattctta  atgtaacctt  atgtattctt  gtatttttac  tgtatatgtc  1020
ttttacaata  aatataaaaat  gaaatgttta  tgttgaacaa  aaaaaaaaaa  aaaaaaaaaa  1080
aaaaaaaaaa  aaaaaaaaaa  aaaaaaaaaa  gggggggggg  gggcaaaaaa  tatctccgca  1140
gggggcccac  attgcagctca  cacccttttt  tgtgcacaaa  gggggcccaa  aagggaggcc  1200
gataaaacga  aggaagcgggc  gccggggaca  aaagcgctgt  cgcgggaaac  cgcgccctgg  1260
gaactggggg  agggaccac  ttggcggggc  accggggcac  acccccaaaa  gatagagccg  1320
ggcacaaccc  tcgggtagg  ggtcacagcg  cgcgcgcgcg  caaatcgccg  actataaaat  1380
ca

```

<210> 102

<211> 816

<212> DNA

<213> Homo sapiens

<400> 102

```

ggtaagtgtg  gatcagattt  cagatctagt  gtttctagaa  cttatttcct  cagtctgtat  60
tctcaacttc  tagcaaatgg  atatttacag  agcattatag  gctctggaac  tagaagatac  120
tgcattctta  acaatataac  aataacatag  cttaagcact  tatcaagtta  tatggtagat  180
taccattagt  aatacattga  aatatattaa  atttagtttt  tggcaggctg  gataaacacc  240
ctactaattt  tctaaaattg  taagtagaac  tcttcatatt  ttgttacact  ttgttgaag  300
ttaaaatagct  tttttatcac  aaaattttaa  ttcataaaat  ttcatgtccc  tgagcaaatg  360
aatctttaat  attcagttta  gtatacagtg  aagagggaag  attggcatga  ataatacaaa  420
aacaataaac  atgctttgtg  ataccttaaa  ttatccacat  gtaacatctg  gataatcatt  480
taaccttttt  ccatactgac  cagctttatt  ccaggaacca  cctccagcta  ttaaaaaagg  540
tttcagaagt  tcagagttat  ttttattcag  gcaagaaagt  accaagtatt  gtgactagtt  600
agataagggg  tggggggaag  acagtatag  gtggatcatt  aggcataatta  taagaataaa  660
actagtttta  tagtgccctc  tttttactta  cccattcaca  tattttgctt  acatttcgta  720
gcatcattta  ataattttca  aagaaagtgt  tattacattg  tttagatttt  gtacatacag  780
gttagctagg  tttttagtaa  agtgaccttg  tgaatg

```

<210> 103  
 <211> 980  
 <212> DNA  
 <213> Homo sapiens

<400> 103  
 ggtaagtgtg gatcagattt cagatctagt gtttctagaa cttatttctt cagtctgtat 60  
 tctcaacttc tagcaaatgg atatttacag agcattatag gctctggaac tagaagatac 120  
 tgcattctta acaatataac aataacatag ctttaagcact tatcaaagtta tatggtagat 180  
 taccattagt aatacatatg aatatattaa atttagtttt tggcaggctg gataaacacc 240  
 ctactaatTT tctaaatttg taagtagaac tcttcatatt ttgttacact ttgtgtgaag 300  
 ttaaatagct tttttatcac aaaattttaag ttcataaaatg ttcatgctcc tgagcaaatg 360  
 aatcttaatc attcagttta gtatacagtg aagaggaagt attggcatga ataatacaaa 420  
 aacaaaaaac atgcttttga ataccttaaa ttatccacat gtatcatctg gataatcatt 480  
 taaccctttt ccatactgcc cagcttttatt ccaggaacca cctccagcta ttaaaaaagg 540  
 ttcagaaat tcagagttat ttttattcag gcaaagaagt accaagtatt gtgactagtt 600  
 agataagggg tgggggggag acagtagatg gtggatcatt aggcatatta taagaataaa 660  
 actagtttta tagtgcccca tttttactta cccattcaca tattttgctt acatttcgta 720  
 gcatcattta ataatttaca aagaaagtgt tattacattg ttagatttt gtacatacag 780  
 gtttagctagg ttttttagta agtgaccttg tgaatgtttt agaagggcaa gggaaattat 840  
 gaccctcgtg tagggagaaa aaaaaaatgc tgcaagtact agaactacaa gattagccac 900  
 agtgattttg aagaaaatgt gcctctattg aatggaatta tggaattatc cccctacttt 960  
 ttttggtttt tggttttatt 980

<210> 104  
 <211> 426  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> unsure  
 <222> (83)  
 <223> a, c, g or t

<400> 104  
 ggccctggagg aggatttgat tggaaaacca acgggtgcagc tggccgcggt gtcctctgagg 60  
 ttgaggggac cgggaatagg ctngggggag gacgggacgg gctgagactg gacgggaccc 120  
 ccggtctgca gcagcaggtg acagcagcag ggacaatgat aaggagattg gcctgaagga 180  
 gggaccgtcc ctcccgcgcg gtgagtaggc gggagcgggt ctggtctgtg ccggcgagca 240  
 gcttagtca gggctctccg ggagacgtcc tcaggctcct gtggagcggc cccgaagcct 300  
 cgggagccag ctccactaga caaqaqcaq aqgtagaqaa tgcggctgtg gtgcgttaag 360  
 gagtcactgc gtgaggcagt cttttcaaa gagggtgggtt tgtgttgga ggaattatg 420  
 tgggaa 426

<210> 105  
 <211> 816



&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 105

```

gagagggaat gcaaacaca agaaaaacat gaaacagaat atgaatgaaa aaaagataat 60
gttgagaaaa aagcaacctt ttttaatgct taatatgggt atttagtatt cttagagagt 120
tagttaaagg tccatgaaag aacaagatgt tatgaaaaag ggacagaaca agcaagtctc 180
cttgaaaatt aaaaatttga gcaccaaatt gaaaaattca ataaagtaga agataaagtc 240
taaggaaagta ggataaaaaa acaaaaatag aaaaataggag tgaagataaa gaaaatttga 300
agctaaatca aggatgtcca atttttgaca ataaaggttc cagaaagaaa ggacagagaa 360
aggggaaatg gaactttcca agaacgaaat gacgcaatct ccagattgaa aggggtataat 420
ggattaagat tcacttccaa acatatcata ccctagaagc ttctggaaaag agaaaaaagt 480
aagccaaata tgtaaagtag cagaaatgga aagtcttctc tctagcaaca ctgaaagcta 540
aaagactgtg aagaaaggcc ttcagaattc tgaggaaaaa tgcttttggg aatagaactc 600
tataaactaa agactcatat caggggctca aaaaatgtac ttctcatggt tatgctccag 660
caaaggcac tgataagaaa gaggaagtc tagatggagg aacaggggaa cctactatgg 720
aagagacaga gagatgtccc aggagaagag aattcatctt ggctatgga acagccagtt 780
ggtattacag cagaaggatg cagtgtctg gatgga 816

```

&lt;210&gt; 106

&lt;211&gt; 884

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 106

```

gagagggaat gcaaacaca agaaaaacat gaaacagaat atgaatgaaa aaaagataat 60
gttgagaaaa aagcaacctt ttttaatgct taatatgggt atttagtatt cttagagagt 120
tagttaaagg tccatgaaag aacaagatgt tatgaaaaag ggacagaaca agcaagtctc 180
cttgaaaatt aaaaatttga gcaccaaatt gaaaaattca ataaagtaga agataaagtc 240
taaggaaagta ggataaaaaa acaaaaatag aaaaataggag tgaagataaa gaaaatttga 300
agctaaatca aggatgtcca atttttgaca ataaaggttc cagaaagaaa ggacagagaa 360
aggggaaatg gaactttcca agaacgaaat gacgcaatct ccagattgaa aggggtataat 420
ggattaagat tcacttccaa acatatcata ccctagaagc ttctggaaaag agaaaaaagt 480
aagccaaata tgtaaagtag cagaaatgga aagtcttctc tctagcaaca ctgaaagcta 540
aaagactgtg aagaaaggcc ttcagaattc tgaggaaaaa tgcttttggg aatagaactc 600
tataaactaa agactcatat aggggctcaa aaaaatgtact tctcatggtt atgctccagc 660
aaaggaaata gataagaaag aggaagtcac agatggagga aacaggggaa cctactatgga 720
agagacagag agatgtccca ggagaagaga aattcatctg gcctatggaa cagccagttg 780
gtattacagc aagaaggatgc agtgctctg atggaaaagt ttccagggaag aaataaaaat 840
gagtcagaca agtagcctga aaatgttgaa agattttggc caga 884

```

&lt;210&gt; 107

&lt;211&gt; 1232

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens



&lt;400&gt; 108

```

gtgctatagt gttagcagcc gtataaatgc agtatgtgat tttctctctc ttgtctcttg 60
tcactttttc ttataaatat ttttctaact ctgtctttta agttctctatt accttttagga 120
gtcctccagc aaaaaaatat gaaaccttat ttcatgaaa gccttttttg ttccacaatt 180
tgccatttgt tattaaagcc cctctactga agagctacaa acccatttcc tctactatt 240
tcacccctcc tattctgttt cttaaatgtc ttctgtgcct taaatgtctt ctgtgcatcc 300
tattggaagaa gaacctctct aattcagaat tcacagcatg gagagagaag ttatttgctt 360
atttcattca ttaataacta gagccacca cataccacat cctattttaa gtgtgcatta 420
tttcaaaaat gcaagggaat atngattata gtgaagtggg ctcatccta gcaacactat 480
atatgcaaaa atttcagtg cttgaatggg tacacaaaca gtttggtttg tntncaatgt 540
taangtcctg ttttgttgaa atgttgattt ttaaaaaggc ttttgaaagta aactgaagaa 600
ttcactttat gagaaaaaca ttgaaaactt gtttccctacc tacaataatc aaaattatta 660
aagaggcatg tgaataatta taattgaaag agtatattaca ttatttcctg ttttataatt 720
ctgtgcaaaa aattactaag aattgggtca ggttgccatt aatatgaagt gcttagaattc 780
ctgtatatgc caaagaact gcactctgta catgtaatat tttctgtctc tattgttaact 840
tgagaatttt actatgatat tttagtttct 870

```

&lt;210&gt; 109

&lt;211&gt; 210

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 109

```

agaagtggca ttcttaaatt caagaaattg ggaatggggag tattcacaca ttttataacc 60
cagaaattca agcaattctg gtgactacaa atgcatttgt ttggagaata gttgtaagggt 120
ggaaaaagaa tttaggaact gacagatagt gagttttaac tttaaataac aattcttctt 180
ttgttttttt ttgttttgaga cgggggtctcg 210

```

&lt;210&gt; 110

&lt;211&gt; 861

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 110

```

atcacaggca tgagccaccg cgcttgggcca gaagtggcat tcttaaatcc aagaaatggg 60
atggggagata ttccacacatt ttataaccga gaaattcaag caattctggg gactacaaat 120
gcattgtttt gagaatagtt gtaaggtgga aaaagaatta ggaactcgac agatagttag 180
ttttaacggt taattaacaa ttcttctttt gttatgttgt gtttgagacg gggctctgct 240
ctgctgcccc ggctggagtg cagtgggcagg atcacggttt attgcagcct taacctctgt 300
ggctcaagca gttctccctc ctccagcctc agagttagct ggactatagg caagtggccac 360
cacgcctgac taatttttaa attttttgta gagatggggg ctcccatctt gccaggctg 420
gccttgaact cttggggtca agcaagcctc ccacctctgc ctcccaaagt ccaaggatta 480
cagggtgtgag ccattgcccc cagccagtat aacagttagt gtgtgtgtgt gtgtgtgtgt 540
gtgtgtgtgt gtgtgagaca gagggtgtct attctgttgc acaggaagta gtgtagtggg 600
gcgaccatgg ctacagagaa gatactagaa ttctcaggct caagtgtatc tctcacctag 660

```

```

aactagttag tagcagagga tacaggcata gaataacaga catggaatta attaaaaaaa 720
atgttttagcg tgggaagacag ggctcctaac atatgtgacc atggactggg ctgagaacatt 780
gtgaacgacg aagataatcc tcgtggactt gggacctcat caaaatgggt ggacatacag 840
gtgtgagcac ggttgcaata a                                     861

```

```

<210> 111
<211> 777
<212> DNA
<213> Homo sapiens

```

```

<400> 111
tatacttcca cctatctatt aaaacttatg cctcaattt ataatgata gtaaggcctt 60
ctctgaattc attcatttat ttttcatcaa caaatgttta ttgagcttct acaaggcact 120
tgggtactca agaccagaca gatttgtttt tacaatcata ttagtcatct ccagtctctt 180
agcaaagaat ttgttgttca actgttagca attttctatt gttaaatatgc tagaatgtca 240
gtccacgga tgttggagat tgaccatac gtagaattcc aaatggatat ataggaaagc 300
catttaaaat gtcttaatat ctccagaaaag gaatttcaca ctctcttcta aaattttgat 360
tttgtcattc tcgttacctg ctatagagg ccttttcatt tgtacattta actccataat 420
ccaagaaaaa gcagtttggc aagggggcct tgttgggttt gaaatgttct ctttttttag 480
ctttgtaggg cacagaagac tgtgggtatt caaaagtaaa gtaatttaag aaatatgttt 540
gtttaattta taaggtagaa aattagagat agctctaaga attgcagtaa gccacagaaa 600
tcaaatcgca agacttgcaat actacctgta ataacttaat ccccaataaa acggaatgag 660
atgttgaatg tgaacatgct ttgtaaactt gaagggtgtc tgtgaatgct gtacagcata 720
ctagaaggta tgactgtgct agagagaatg gagaattcac ctgccacaaa aatctggt 777

```

```

<210> 112
<211> 1076
<212> DNA
<213> Homo sapiens

```

```

<400> 112
tatacttcca cctatctatt aaaacttatg cctcaattt ataatgata gtaaggcctt 60
ctctgaattc attcatttat ttttcatcaa caaatgttta ttgagcttct acaaggcact 120
tgggtactca agaccagaca gatttgtttt tacaatcata ttagtcatct ccagtctctt 180
agcaaagaat ttgttgttca actgttagca attttctatt gttaaatatgc tagaatgtca 240
gtccacgga tgttggagat tgaccatac gtagaattcc aaatggatat ataggaaagc 300
catttaaaat gtcttaatat ctccagaaaag gaatttcaca ctctcttcta aaattttgat 360
tttgtcattc tcgttacctg ctatagagg ccttttcatt tgtacattta actcataatc 420
caagaaaaag cagtttggca aggggggcctt gtttgggttg aaatgttctc ttttttttagc 480
tttgtaggcc acagaagact gtgggtattc aaaagtaaa taattttaaga aatatgtttg 540
tttaatttat aaggtagaaa attagagata gctctaagaa ttgcagtaag ccacagaaat 600
caaatcgcaa gacttgaata ctacctgtaa taacttaat ccccaataaa acgaatgaga 660
tgttgaatgt gaacatgctt tgtaaacttg aagggtgtct gtgaatgctg tacagcatac 720
tagaagggat gactgtgcta gagagaatgg agaattcagc tgccacaaaa atctgggtcc 780
ttccgctctc agactctgtt gaggaaagaa gatatgcaga aataaccacg tgataaatgc 840
aaaaaagaag atatttttgg gtaatttgag gaaggaagggt gtcctcttcta tccttggcag 900

```

```
tccagagact cttgagaaaa agcatctaag caagtccttg aatgatgtgg catttcaata 960
aaagagatgg agaggaggca tttagatag gaggactagt aggagatgga gaaacttgga 1020
gacatattca gggaaaaagca tcaagtccaa ctgagttaga actggagcag agtcgg 1076
```

```
<210> 113
<211> 190
<212> DNA
<213> Homo sapiens
```

```
<400> 113
cgtacgtaag ctcggaattc ggctcgagaa tattttcaag tcatattata atgatggggg 60
ttccccagct accttggatt gaaataaacg ggtagaatg gagaacagat gacaggagtc 120
ttctctgaaa tttctgagag gccacacaat cttaggttga ataaagaagg aataagaata 180
ggaaatacgg 190
```

```
<210> 114
<211> 622
<212> DNA
<213> Homo sapiens
```

```
<400> 114
tgggggttgat tgagaaagtg ggccaagat aaggaagtc tgtgggccct cgcagccac 60
ccgccactat cagcgagcat gtgaggatat tggacctca cccaagattt catttagggg 120
tatactaggg tttttagtgc taacctatt tgagagaaca ctgcccacac agatctgcat 180
ttacctatta ggcataaaca cttggaatac caaatgtacc agatccgctc atagtagtaa 240
gtcagaagtc agcttccttc cctgtttgtg ttaggatacc accatgcgta atcatcctga 300
aacaagggtg cgggggagga tttggaaaac ttgttcctaa ataaagctgtt ttctaagttg 360
agctccctct ctctagaaag ttctcttagg aacattatgc atattggaga caaagataaa 420
acccttttta ttaaagtaaa aaaaaatggt gatagttggt ggtgatgtcc aaataatatt 480
ttcaagtcac attataatga tggggtttcc cccagtactt tggattgaaa taaacgggtt 540
agaatggaga acagatgaca ggagctctct ctgaaatttc tgagaggcca cacaatctta 600
ggttgaataa agaaggaata ag 622
```

```
<210> 115
<211> 801
<212> DNA
<213> Homo sapiens
```

```
<400> 115
cggtaacagg aaggacttac ccaccattc ttgggactct tgtgagctgt ggaaaggcct 60
cttgggagat tataggtaca gaataccggt ggctttcgcg ggactttgaa aactaatgta 120
tgagcatttc tgctgccaga ggatagtgtg gttcgtgact cagtggctgg tcacacagag 180
aaggttgaca cacagtgggt gaaagggttg aggtgcgcgt gatggggtgg ctgtgtgcaa 240
aaggctgcc ctcagctggt cagggactcg tttgaatgat gagtgatggg tgagaatatg 300
tgtcctctcg atggagttgg ggatgaacag ggaaagtgtg gtgagacttt atagaagggt 360
```

```

cagtggtctag agcaggcgata ttcattgttc tgctagtaac agaaccgaag gcaagggtctg 420
agctgggagca cgggtggggac ccaaaagtggt agagactgtg tctgcccaca gggaggtttat 480
ggtcaggagg gatgggcaag tacagggata agtaacacaa gacagactgt gtttaaacca 540
cccagtgaag ttacaaccag aggtggtggg aatgcagagg aagagggggag cagagagcac 600
ctgagatggg ctgtagttca gaaggggaaa aatgaagggc cctccaggtt gaacagcatg 660
agtgttcaga gacagcatgt atatggttta tggagaacgg tttgcctggg gagtaggtag 720
ctctgggaaa caacacttgg aaaaattgga ttgagtttag atatgtaagg cttaatgcc 780
tgctaagaaa actatactta g 801

```

<210> 116

<211> 1657

<212> DNA

<213> Homo sapiens

<400> 116

```

cagggtattac tcgactacta ccatgaacga tacagtaact tagccaggcc tgggtgggtga 60
aacctgtagt tccagctatt taggaggctg aggtgggaga atctcctgag cccaagaggt 120
caaggtggca gtggctgttaa ttgtgccact gcaactcctgc ctgggtgaca gatgagagac 180
ttgtctcaaa aaaagaaga aatttttaa atttcttgaa acaaaagac 240
aacatactaa aacctacagg atacagcaaa aacagtacta tgaagaaagt ttatagcaaa 300
agtgcctaca tcaaaaaagt agaaaaactt caataaaca acctaaaaat gaattctaaa 360
gaattagaaa agcaaaaagca aaccaaacc aaaatttagta gaagaaaaag atcacagcag 420
aaataaaatca aattgaaaca gaaaaaacac aaaagatgaa aggaaaaaaa aactgggtgt 480
tggaaaaaga taaacaaaat ggacaaacct tttagccagac taagaaaaaa agagagaagg 540
ctcaaatata taagatcaga gatgagacat tacaagcaat accacagaaa ttcaaaagat 600
cattagaaac tactggccag gcatgggtggc taacacctgt aatcccagcc ctaagtatat 660
ttttcttagc agggcattaa gccttacata tgctaactca atccaatttt tccaagtgtt 720
gtttcccgag gctacctact caccaggcaa accgtttctcc ataaaccata tacatgctgt 780
ctctgaacac tcatgctgtt caacctggag ggcccttcat tttcccctt ctgaactcaa 840
gccatctca ggtgctctct gctccccctt tctctgcat tcccaccacc tctgggtgta 900
acttcaactgg gtgggttaaa cacagtctgt ctgtgtgtac ttatccctgt actgcccac 960
ccctcctgac cataaaactcc ctgtgggagc acacagcttc tcccactttg ggtccccacc 1020
tggtctccagc tcagacctgt ccttcgggtt tggtactgac agcaaatga atatgcttcg 1080
cttagccact gcaccttcta taaagtctca cacaactttc cctgttcatc cccaactcca 1140
tcagaggagc acatattctc acccatcact catattcaa acgagtcctt gaccagctga 1200
gtggcagcct tttagacaca gccaccccat cagcgcacc tccaaccttt caccactgt 1260
gtgtcaacct tctctgtgtg accagccact gagtcacgaa ccacactatc ctctggcagc 1320
agaaatgctc atacattagt ttcaaaagtc ccgcgaaagc caccggatct ctgtacctat 1380
aatctcccaa gaggcctttc cacagctcac acagatccca agaattgtgg ggttaagtcct 1440
tcctgttacc gatgatggct ctgaatttcc aacacgcat aggtctccat gccctttat 1500
gcttctggg tctcaaccac ttcaaaaccc ctcaaacagt acctatccaa agcaaatcgc 1560
tgggcaggcc cccaacaga acctgtgaga cacagttaag gataggaaaa tgcaggcgtg 1620
aagccatgac tgctgacctt tatagaagat gtgcctt 1657

```

<210> 117

<211> 1041

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; unsure

&lt;222&gt; (759)

&lt;223&gt; a, c, g or t

&lt;400&gt; 117

```

aattgctaag aaagcatctt gactggaggc aaagaaccaa aagctattca attaatctta 60
ccagttctgt cttaaggcca cagaagatc atgatttggg atatatccat atatttttaa 120
ttaaagagga ggggtattac tcaagaaatt tgtacaaaat ataaatatac tttttaagta 180
ttaagaaaat atctatactc tacaataat gttaccatgt agcatatgaa ggctatggta 240
ttctaactaa agaagcttaa gatattttca tgggatattg ttctgccaga aaatatctat 300
gtgcagtgtg gatatatgat gtagaacaaa aaaattgtat atactccaaa gtattattta 360
atgcagaaaa ctgaaaatct tcaaaagtta caaaaaaact tcaccatgtc caatgcagct 420
ggtaggaaaa atattttctg aagaccagaa ataaactaga agaaggattt acaggagtaa 480
taaaactgag aaaccgctac tccttcggg tcttgattga ttgcaaggac ctcaaaactg 540
tgtagattgc ccaattttacc ctcttgaaat aaacaaagaa aaagtactga ctgaagcaga 600
tcataaaata taaaacacag aagaaaataa gctaccactc taaagaatga gaaaaaaatt 660
aattgtatac attttagtta ttttaaatat acttaaaata ttaagtataa cgcaatgggt 720
aaaatagaaa attttaaaaa atgatttgaa aagaccaana aattgtaaac taaacaagca 780
tatttgggaa aggagccaaa gagaatttga aaaaaaaaaa aagtttaata cacaattatt 840
gggttaaaaa ttaagttaga ctcacatgat aaaaagatta gtaactgca atattgagca 900
gaatgaatat caccaaaata agacaaaata taaaaataca aatataatta taggaagaat 960
atgagaagga aaatacatct aaattatcca atagaatata taaactata gaatatgtaa 1020
atagaatgta taaacatttc c 1041

```

&lt;210&gt; 118

&lt;211&gt; 688

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 118

```

ttatttccta agtactcatt ttaaaccttc ctctgtttta atggaagggt cgcacctttt 60
acacatagtc ctttaaagta agagtacctc ctcccagat acgtgcagag cccagcccta 120
ccagttctgt aagccactct gacacagacc aatgtttttt caggggtctc aggcctttat 180
ctcacaggtc tgcaacctgt tctgttgcta caggcaccat atctagtgtc gtatgagaca 240
ctaggagaca aaggcgaaaa ggctttcatt cctgacacag cctgcatatt tgcttcaatt 300
tgaagtgggt tgaacacact gccaaaggag cccagaggag ggaaggaata aagctgcctt 360
gaaggacaaa gaggaagtgt ttccagagga ggcaacgatt gaatgggacg aaagcttcac 420
aggacttcac tgaaccagag gatggagaag gacactctta ggaataggaaa agttgaaaaa 480
tcccaagag gcatgttaca ctatgaagcg tttggacaat gggctacaca aggttgaaat 540
gggaggttgg aataaaactg tgaagagctt tatgacgcca tggtaaaagt tctggatttt 600
atctcaatgc agcaaggcca gggggtgaag aatcacataa taaaataggc atctgtctct 660
gaaataacca tacagaattt aattatttt 688

```

<210> 119  
 <211> 762  
 <212> DNA  
 <213> Homo sapiens

<400> 119  
 cagaagccca gttatacaaa ttaggctgtc tgatggagac agggatagct ctggctattt 60  
 atttataaaaa aaaattattt cctaagtact cattttaaac cctcctctgt tttaatggaa 120  
 ggtgctgtccc cttaatacata tctcctttaa agtaagagta cctccttccc agatacgtgc 180  
 agagcccagc cctacccagt tctgaagcca ctctgacaca gaccaatggt ttttcagggg 240  
 tctcaggcct ttatctcaca ggtctgcaac ctggtctggt gctacaggga ccatacttag 300  
 tgctgtagta gacactagga gacaaaggcg aaaaggcttt cattcctgac acagcctgca 360  
 tatttgctct aatttgaagt ggtgtgaaca cactgccaag gaagcccaga ggagggaagg 420  
 aataaagctg ccttgaagga caaagaggaa gtgtttccag aggaggcaac gattgaatgg 480  
 gacgaaagct tcacaggact tcaactgaacc agaggatgga gaaggacact cttaggatag 540  
 gaaaagtga aaaatcccaa agaggcatgt tacactatga agcgtttgga caatgggcta 600  
 cacaaaggtg aaatggggagg ttggaataaa ctggtgaaga gcttttagca gccatggtaa 660  
 agtgtcttga ttttatctca atgcagcaag ggcagggggt gaagaatcac ataataaaa 720  
 aggcactctg tcttgaaata accatacaga atttaattat tt 762

<210> 120  
 <211> 576  
 <212> DNA  
 <213> Homo sapiens

<400> 120  
 ggtgtaagcc accgcacccc gccagcctg gcagatttta tttaatcatt tgtagcttca 60  
 ttttcctctg ctgtcaaaaca gggatactgt aatacaacct cagtgtgtca ttgggcagtt 120  
 taaatgaatg tacattcctg aggcacatga actttgttca ctgttatata cccaatgcct 180  
 agaagaggag ctgcacatag cagggtgtca gtaaatgttt gttgaatgaa tgattaaagt 240  
 catgtaaaagc attaaagcata gcgcctggca gtaagtgtctc aatattatga ctctttatat 300  
 taacacgctt tacatatataa gaaatggagg caagaaagca tttcctttgg ggttttagagc 360  
 gcttaagtgt ttctctctgtt atcatgcctg aattcccccg cccctcagtt acctggggaa 420  
 gagtaaaaggc aagaattctt accagcatga gtcatatcct ctctctgatag gaatctgcga 480  
 aaacacacac ttctgctttt agttctattc ttgaattctc ctctctgggt gttgctcctt 540  
 tgttccttca ttgtaataaa atgggattct gaaagc 576

<210> 121  
 <211> 1055  
 <212> DNA  
 <213> Homo sapiens

<400> 121  
 ctacagctcc agagtagctg ggactacggg cgccccacca ccacgcccgg ctaatttttg 60  
 tatttttagt acagacgggg ttctattgtg tttagccgga tggtcttgat ctctgacttt 120



```

gtgatccgcc  tgcctcggcc  tcccaaagtg  cttggattac  aggtgtaagc  caccgcaccc  180
cgcccagcct  ggcagatttt  atttaaatcat  ttgtagcttc  attttcctcg  tctgtcaaac  240
agggatactg  taatacaacc  tcagtgtgtc  attgggcagt  ttaaatgaat  gtacattcct  300
gaggcatcag  aactttgttc  actgttatat  acccaatgcc  tagaagagga  cctgcacata  360
cgagtgctc  agtaaatgtt  tgttgaatga  atgattaagt  gcatgtaaac  cattaaagcat  420
agcgctggc  agtaagtgtc  caatatattg  actctttata  ttaacacgtt  ttacatatata  480
agaaatggag  gcaagaaagc  atttcctttg  gggtttagag  cgcttaagtt  gttcctctgt  540
tatcatgcct  gaattccccc  gcccctcagt  tacctgggga  agagttaagg  caagaattct  600
taccagcatt  agtcatacat  cctcctgata  ggaatctgcg  aaaacacaca  cttctgcttt  660
tagttctatt  cttagaattc  tctcctgggc  tgttgctcct  ttgttccttc  attgtaataa  720
aatggatttc  tgaagcaaaa  aaaaaaaaaa  aaaaaaaaaa  aaaaaaaaaa  gcacaagaa  780
gaagaacaaa  aaaatagcac  aataaaagac  aacgaagaca  taggggaagc  aagaaacaaa  840
gaaagagaca  gccagagacg  aagcaagaag  aaacagacag  cagcagaacg  gaaagacgaa  900
caacgaactg  cgacaggata  gcaaccgaaa  ccacatagac  atagaagcca  gaacagaacg  960
caaggggaag  gaaaaaaaca  ggacgaggaa  aggaaataga  caccacaata  gagaggcaat  1020
aaccggccac  gaaacaacaa  gagacgagac  cacaacaa  1055

```

<210> 122

<211> 556

<212> DNA

<213> Homo sapiens

<400> 122

```

accgattttc  ctacatatat  gccaaacttc  atggctcttt  ccttaccaca  tggaaaactt  60
ttgaagtagt  gtgatgttga  agaagaattt  gtgatatgtt  caccacatat  gcttttagaga  120
tattctacat  ctaaatatcg  ctgggagtta  gagttgggag  agatttgctc  tagaagcaac  180
atcattgggt  gtgacacctt  gtataatgaa  ttgaaaagga  ctatagaaaa  gtatagatc  240
ctagaaatgg  ttttaactgg  gttttaccag  ttagaactct  gtgatttgga  atatgttatt  300
taacttctct  gggcctccgt  gttctcaaat  ataaaattgc  tgtgatgatc  cctacgttat  360
aggattgttg  tgaggctttg  tgaaggaggg  aacacatgta  aagagttag  cacaaggctg  420
gacacatagt  caggctcaac  aaatggcgat  ggtagtgtgt  tcctaagcaa  ttctatacta  480
cagagaacat  tctcataaaa  ggctgttcac  aggcgagctt  aggccttcag  tccttcaaat  540
agacactaac  acgagc  556

```

<210> 123

<211> 749

<212> DNA

<213> Homo sapiens

<400> 123

```

acctgttatt  acaggcatga  gccaccgcgc  ccagcccatc  ttcattgtct  ttcagccaca  60
atattagatc  cattaatctg  ttttaaggac  acaccgattt  tcctacatat  atgccaaact  120
tcatggctct  ttctttacca  catggaaaac  ttttgaagta  gtgtgatgtt  gaagagaagt  180
ttgtgatatg  ttaccacat  atgctttaga  gatattctac  atcctaatat  cgctgggagt  240
tagagttggg  agagatttgc  tctagaagca  acatcatctg  tgggtgacac  ttgtataatg  300
aattagaaag  gactatagaa  aagtagagtc  acctagaaat  ggttttaact  ggggttttac  360

```

```

agttagaact ctgtgatttg gaatatgtta tttaacttct ctgggcctcc gtgttctcaa 420
atataaaatt gctgtgatga tccctacggt ataggattgt tgtgaggcct tgtgaaggag 480
ggaacacatg taaagagttt agcacaaggc tggacacata gtcaggctca acaaatggcg 540
atggtagttg tttcctaagc aattctatac tacagagaac attctcataa aaggctgttc 600
acaggcgagc ttaggccttc agtccttcaa atagacacta acacgagcac ctgctttgca 660
tgtagcattg tgctagggtg aagagaatca gacatgtaaa acaaaatccc tgctctaagt 720
ttcatagtga gtgaaaaata aaaaacaagt 749

```

```

<210> 124
<211> 122
<212> DNA
<213> Homo sapiens

```

```

<400> 124
gtgaaaaact ttctttcctt ctctgcttgt gatagagagt gaatgaaggc agtcggggcc 60
gggtgggtcg ggggataacc atgtcccagt gttagtgttg ttctgacaaa actcatgctt 120
tc 122

```

```

<210> 125
<211> 583
<212> DNA
<213> Homo sapiens

```

```

<220>
<221> unsure
<222> (488)
<223> a, c, g or t

```

```

<220>
<221> unsure
<222> (528)
<223> a, c, g or t

```

```

<220>
<221> unsure
<222> (553)
<223> a, c, g or t

```

```

<400> 125
agaaatttag aatttaaatg ttgttttaggt catcttttgg tagatccaat caagtttaaa 60
attctaccat gtcttggata tgagcatatg actcattgat ggcgttcagt aaaatctttc 120
tgtgtagtgg gtttaaaatt tgacttaaaa cagggatata atatttacct tccctagagt 180
aacagattta tgttatgtaa taaccttgac atgttttcaa aatcatgttt aatgggctct 240
ccagagctcc agtgaatacc acaatttggg ctgttttcaa catttttaag gaatctggga 300
aagctgtagg aaatgaaata tgtgtcctaa actttttgta tcaggcttaa ctactgcttt 360
cttgaagttt agcaaaaagga taaaggactg tatgtttctc cattaactgt agtcaaaaac 420

```



<220>  
 <221> unsure  
 <222> (40)  
 <223> a, c, g or t

<220>  
 <221> unsure  
 <222> (79) .. (131)  
 <223> a, c, g or t

<400> 128  
 actgaaacag gactagtgtg gtctgggtgt actgcatgan gagaggggca ggtagtgtga 60  
 gataagatca gggtgaagnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 120  
 nnnnnnnnnn naatttctta gagactaaca tgattaaatc aaatcagact gatttttagaa 180  
 acaaacaaaa aatgctaaat ttattacttg aatactaaaa ctgattttta cataaatatt 240  
 atactgattt caaaaataaaa atgggtatcac ttaatttaata tttacaacatt aagttgttga 300  
 atacatatatt caatattgaa agttttttat acattatttt ctttatgagt ttatatgcc 360  
 ctcttacatg aggggatcaa aaaacattca gatggataag tgagaggatg caaaaaaatg 420  
 taggcataaa attacaccat gtgtatggaa aacaatgaat attttattta ccattatttt 480  
 ctaatataca tccatactca taaattcatt atactttcgt tgatgagaca tcaattttac 540  
 attcagctaa actctcattg taactgtgta cttcttcaat tataa 585

<210> 129  
 <211> 118  
 <212> DNA  
 <213> Homo sapiens

<400> 129  
 accacacctc accagatttt taaaaaatat ataactgcat ctctcttgat tctggggctt 60  
 ggtaaaaatg gatagataag atagtattct aaattcaaat tcgtggctag gcacagtg 118

<210> 130  
 <211> 1436  
 <212> DNA  
 <213> Homo sapiens

<400> 130  
 atttcagtat tgagacttaa aatgaactga aaaatgagat tgaacattta atatttttga 60  
 tgtaactttt gaagaaagta tgcttgggtg ttaaaattgt atatgatttt aggttaagaaa 120  
 ctttgataat attggcataa ttttagattta ttttctttct tttttttgag acagtctcac 180  
 tcagtgcgcc aggcctgaagt gcagtgcac agtctcagct cactgcaacg tctgcctccc 240  
 agattgaagt gactctcgtg cctctgccac agagtggctg ggattacagg catgcaccac 300  
 cacacaccgc taattttttg tatttttggg ggagacggag tttcaccatg ttggccaggc 360  
 tgcgaactcc tgagctcaag tgatcctccc acctcagctt cccaaagtgc tagcattaca 420  
 ggcatgagcc accacacctc accagatttt taaaaaatat ataactgcat ctctcttgat 480  
 tctggggctt ggtaaaaaat gatagataag atagtattct aaattcaaat tcgtggctag 540

```

gcacagtggc ccacacctgt aatcccagca ctttgggatt ccaagacaga agactcactt 600
gagtagacagta tgagaccagc ctgggcaaca tagatcttgc ctctacaaaa aaaaaaaaaa 660
atagccagggt gtggccacatg cctgtagtct cagctgcttg gaaggctgaa atgagaggat 720
ctcttgagcc caggaggctct agggccagagt gagctgtgat cgtgccattg gcactccaga 780
ctgagtgaca gagtgagact gtgtctaaaa aaaaagtttg aatataaaaa aaaaaaaaaa 840
aatgtcgtct gtgcaggggg gctcatgcct gtggacccca gcactccgg agggccaaca 900
gggggtggga taacctgttg aggctcaggg agtttggaaa ccagcctggt gaccacacgt 960
gggctgaacg cctccgttcc ctaagtaaca actatcaaaa tattttacc ctgtgggacta 1020
tagcgggcgc atgctgtgat aaaccccgcc taactgggag aggcttgagg caggagaatc 1080
cctttggacc ccgggaaggg ccaagggttt gacgtgacgc tgagattgtg ccactgcata 1140
cagctggggc acacattgag cacaatctct ccatctctaa gatccccac agacaaaaac 1200
acaaactcca atttgcattg taagatcggg cacctaggat tcagttccgt aaacgtctct 1260
gtcacaaata agggcaaaata cttataacgc caaatgtacc tcggcgctcg cacactttta 1320
ccacttgtct ttggccaag ggtatgcttt accaccgggg aggtcgctcg ccaccaatgt 1380
gctcttaact tagcaacct gacctcgccg gtctagaaaa cgcattgttt cccacc 1436

```

<210> 131

<211> 178

<212> DNA

<213> Homo sapiens

<400> 131

```

tacatttgat atttgatact gtaaaaaagt agctatcaca actgtccata ctagtctctt 60
tcgagagaat aagtgttccc tggatagata gatattagtt atagatatata taagtataaa 120
ttatagtata agttatatct tcagtcataa atactataag attcagctga gcaagggtg 178

```

<210> 132

<211> 775

<212> DNA

<213> Homo sapiens

<400> 132

```

tcagcctcct gggctcaagt gatcctctcg ctccagcctc ccaagtagct gggactacag 60
gcatgttcca ccacacctcg ctaattttta acattttttg tcaactatgt cctcagcctg 120
gtctcaaaact cttggcctca accagtcctc cctccttaac ctccaaaagt gtagaattaa 180
tgggcatgag ccaccgtgcc tggcctacat ttgatatttg atactgtaaa agctagacta 240
tcacaactgt ccatactagt tctcttcgag agaataagtg ttccctggat agatagatat 300
tagttataga tattataagt tataattata gtataagtta tatcttcagt cataaatact 360
ataagattca gctgagcaag gtggcatgca tctgtagtcc cagctagttg agatcaaggc 420
taaggcagga gtctactctg gacttaggag tttgagtcta gcctcatagt gatactctgt 480
ctactgaaaa aaaaaaaaga ttgaaccatt gtccactgt ttatgatttt ttttgtctt 540
aattcttatt tatgaatttt tgttctagtt ctgtttctag agagaataaa gcccagggtga 600
ataactttgt tttctttctg gttttagaat tattagtaac aaatccgtgt tcttaattggc 660
agtagcaaac ctgtcttctg tagaattttt aaagagatgt ttctgtcatt agtaatacag 720
aagaagcctt gatcattttc agaataaaga attttacgac agggagaggt ggctc 775

```

<210> 133  
 <211> 535  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> unsure  
 <222> (187)  
 <223> a, c, g or t

<220>  
 <221> unsure  
 <222> (190)..(219)  
 <223> a, c, g or t

<220>  
 <221> unsure  
 <222> (224)  
 <223> a, c, g or t

<220>  
 <221> unsure  
 <222> (228)  
 <223> a, c, g or t

<400> 133  
 gtttcccatg tagaaatctg tgtctaaata tgtattttgt gataagagtc agtgaatcct 60  
 ttattgagct gattctaatt acaaacacaaa gcaggccttg cctcaacag taaaaataag 120  
 ggagaacagg acaagaatac ctgacatgac accagctata ttatatatgt gtgtgtatgt 180  
 atatatnccn nnnnnnnnnn nnnnnnnnnn nnnnnnnnna tatntatntg actatctggt 240  
 tagccatata tgaaccaagg cctgagggaa gagctgatac taagaggagg tttttaaaga 300  
 tgatttagag aatgtttata gaacagtctg tatgagagat ttgaggtttt tgtttggttg 360  
 gttttgtctt tggcagtagc ctgaaaaaac acataaagag ttaagaatat gttttatagg 420  
 tttgggggaa gcatacctgta gagagagtga atttgaacag aaaaaagaga gagggaaagc 480  
 tggcaaaagc aagtctgact cctgatgcaa aatgcatag aagactggat aaaat 535

<210> 134  
 <211> 579  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> unsure  
 <222> (184)  
 <223> a, c, g or t

<220>  
 <221> unsure  
 <222> (187) .. (216)  
 <223> a, c, g or t

<220>  
 <221> unsure  
 <222> (221)  
 <223> a, c, g or t

<220>  
 <221> unsure  
 <222> (225)  
 <223> a, c, g or t

<400> 134  
 tccccatgtag aaatctgtgt ctaaatatgt attttgtgat aagagtcagt gaatccttta 60  
 ttgagctgat tctaattaca aacaaaagca ggccctgccc tcaacagtaa aaataaggga 120  
 gaacaggaca agaatacctg acatgacacc agctatatta tataatgtgtg tgtatgtata 180  
 tatnccnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnat ntatntgact atctgggttag 240  
 ccataatga accaaggcct gagggaagag ctgatactaa gaggagggtt ttaaaagatga 300  
 tttagagaat gtttatagaa cagtctgtat gagagatttg aggtttttgt ttggttggtt 360  
 ttgtctttgg cagtagcctg aaaaaacaca taaagagtta agaatatgtt ttatagggtt 420  
 gggggaagca tcctgtagag agagtgaatt tgaacagaaa aaagagagag ggaagactgg 480  
 caaaagcaag tctgactcct gatgcaaaat gcatgagaag actggataaa atttccactt 540  
 gcatgtttat agcagcatta atcctaaaag ccagggcgg 579

<210> 135  
 <211> 503  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> unsure  
 <222> (421)  
 <223> a, c, g or t

<400> 135  
 gtgattttatt ttaatggaa tttgtttat catgaagata ccaaaaagtg cggcagaaat 60  
 attaaagagg gagcttctta taaccataaa ttatacagct cagcatttcc cattttttct 120  
 ttcttctcct gtgccaatgc ttgggaggaa accagagat gaacaagaac tgttttacct 180  
 tctagtggag aaaggacaat ttgcagtgga aagaatgtgt gtgtcgtccg ttgtactctg 240  
 aaaaatgtgaa ctgcttctgt agtcctgagg actgaggaaa agagatgttg agtaaaagt 300  
 actgataatt ccagctattc aatcttatct cactttttcc tctcttttat ctctgcccaa 360  
 atacctctac ttatgcacct actttgaatt tgcaacagtg aaggctgggg gataggagac 420  
 ngccagtagt gctgagtagt gtcaagtaca gttaacagtg aaatgcggat ttctactcat 480  
 caaatcagca atcttaaat ata 503

<210> 136  
 <211> 435  
 <212> DNA  
 <213> Homo sapiens

<400> 136  
 gcagttgaac tgaatagtca ttgagaccct ttctgctgtat gtgctgctat accaggggcg 60  
 atgatggggc agtgggtttcc agacatggga gccagttcgt ctgtgaggat tttctccagg 120  
 catagtcaag tgtggaaaaat gaggacaatg tgggtgaactt ttcataaacc aatggattca 180  
 ggttgaagac ctggccattt tttctcgaga ttatatctct ccaatcttta tccttagcca 240  
 cagtgtcttc tttaatgaaa tgggtgttgat tatggatgat agattttttt ttctgttggc 300  
 caaattagaa gttggaaaacc ctagggttgtt attccttccc tccccaaat ttcaaagctt 360  
 taccagtttg agaaatccca gaatctcagt cctcaagaaa ttgaaacctc taacaaggat 420  
 acgtggatgt gcaca 435

<210> 137  
 <211> 596  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> unsure  
 <222> (569)  
 <223> a, c, g or t

<400> 137  
 gcagttgaac tgaatagtca ttgagaccct ttctgctgtat gtgctgctat accaggggcg 60  
 atgatggggc agtgggtttcc agacatggga gccagttcgt ctgtgaggat tttctccagg 120  
 catagtcaag tgtggaaaaat gaggacaatg tgggtgaactt ttcataaacc aatggattca 180  
 ggttgaagac ctggccattt tttctcgaga ttatatctct ccaatcttta tccttagcca 240  
 cagtgtcttc tttaatgaaa tgggtgttgat tatggatgat agattttttt ttctgttggc 300  
 caaattagaa gttggaaaacc ctagggttgtt attccttccc tccccaaat ttcaaagctt 360  
 taccagtttg agaaatccca gaatctcagt cctcaagaaa ttgaaacctc taacaaggat 420  
 acgtggatgt gcacatcaga tgctatgtct caaggatgac atttagtgcc ctccaagaag 480  
 tagaagtgat gccgggggaa caccaaggaa gaaggaccag catctctctg gggagcctgc 540  
 agacggtctg tgcataaagt gctttcaang gatggacatg ggactgaaag gagtta 596

<210> 138  
 <211> 467  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> unsure





agaaacaaac cctattccca gaactatgct gacaacattg atgatggcag cacacaaatt 480  
 aggaggtaaa caaaacgcca tgtaatttc aggctccatt agaaacacag tcagg 535

<210> 141  
 <211> 960  
 <212> DNA  
 <213> Homo sapiens

<400> 141  
 ggccgctcat tttttttttt tttttttgta ttttttagtag agacgggggt tcaccgtgtt 60  
 aaccaggatg gtctcgatct cctgacctca tgatccaccc ggctcagcct ccaaagtgtc 120  
 gcgattacag gcgtgagcca ctggataagt cttttttaa aaagaggtct tatgcttttc 180  
 aaatgtatct actgattgaa aaatgcttct ggagaagatg aatattggta atgaaataat 240  
 agaagctgac taatggacaa aacagtggga tcaaaagact aggaagactt aaagacccaa 300  
 gcaaaaccca tctctgtttc taaaaattgt tgtgacattt caaaacactt tctcacagaa 360  
 gaaatactat ctccccatct cccaaactga gcttgatatg accatgaagc ataaagcataa 420  
 cttagtgtga gaaagcgaag gcaaaataaa aaattcagga agaactcaggt gtcctctctt 480  
 tataggagag acctgaagac ttggaatagg tagcttcacc aaagaatagg agaagagcgg 540  
 agaaccgggg ccacaaggc atcctttgaa ggatgaagac aactaggaag gctcgatttc 600  
 tgggtaccat gtgaacagag aatagagggg agtcagggaa tactcagctg tgtcaaaagc 660  
 agccataaaa tgtcatcgag gataagcact cgaagatcgt tgcggggctt ttatagccaa 720  
 caatgcagaa ggtcattgcc tgcttggcta agaccatttc tgtgaaaaga agagattttt 780  
 aaactggaat gggatgagta gagcagcctt tctgcattt cttccttttc tggctcaaga 840  
 gaagcagaaa caaacctat tcccagaact atgctgacaa cattgatgat ggcagcacac 900  
 aaattaggag gtaaacaaaa cgccatgtta atttcaggct ccatagaaa cacagtcagg 960

<210> 142  
 <211> 564  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> unsure  
 <222> (554)  
 <223> a, c, g or t

<400> 142  
 tggcacaactg tgggaagaga ggcctccagt gtttagagtg atattatcat gtgtaccact 60  
 actattatc atactaaagg tattcagaca ggtggctgtt ctctgggctt tatatagatc 120  
 tctgtcaagc tagaagaaaa atgtcactaa aataattcaa gacaattttt gtactttcca 180  
 acgatgttca ggtaacagct gaaaatattc tcacttattt gacttgagga agaaaattcg 240  
 aacgagggaaa atcatcaagg atttgctaaa gtcctctctg taaaatcttc ctaaggaag 300  
 tttaaacact cctattctct cttctctcat tctttgaac tcactgcagt tattgatatc 360  
 actgacttgg tttgttttct agaatatatg taaaagtaag agtggtgtata tataaccatc 420  
 tatgtacata acaagaacag ttccttccaa tattcaaat tcatgactct agatcactac 480  
 tgtgcattct aagaagggtca gggactcatg gagaccaaag ggtcaatcct ggtcatttgt 540

gtctctacgag aganaaaca gagc

564

&lt;210&gt; 143

&lt;211&gt; 4906

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 143

```

atgggtaaagg gatcaattca acaagaggag ctaactatcc taaatattta tgcacccaat 60
acaggagcac ccagattcat aaagcaagtc ctgagtgacc tacaaagaga cttagactcc 120
cacacattaa taatgggaga ctttaacacc ccactgtcaa cattagacag atcaacgaga 180
cagaaagtca acaaggatcc ccaggaattg aactcagctc tgcaccaagc agacttaata 240
gacatctaca gaactctcca ccccaaatca acagaatata catttttttc agcaccacac 300
cacacctatt ccaaaattga ccacatagtt ggaagtaaaag ctctcctcag caaatgtaaa 360
agaacagaaa ttataacaaa ctatctctca gaccacagtg caatcaaact agaactcagg 420
attaagaatc tcactcaaaag ctgctcaact acatggaaac tgaacaacct gctcctgaat 480
gactactggg tacataacga aatgaaggca gaaataaaga tgttctttga aaccaacgag 540
aacaagaca ccacatacca gaatctctgg gacgcattca aagcagtggt tagaggaaaa 600
tttatagcac taaatgccta caagagaaag caggaaagat ccaaattga acccttaaca 660
tcacaattaa aagaactaga aaagcaagag caaacacatt caaaagctag cagaaggcaa 720
gaaataacta aaactcagag agaactgaag gaaatagaga cacaaaaaac ccttcaaaaa 780
atcaatgaat ccaggagctg gttttttgaa aggatcaaca aaattgtag accgctagca 840
agactaataa agaaaaaaag agagaagaat caaatagaca caataaaaaa tgataaaagg 900
gatataacca ccgatccccc agaaatacaa actaccatca gagaatacta caaacacctc 960
tacgcaataa aactagaaaa tctagaagaa atggatacat tctcgcacac ataccacctc 1020
ccaagactaa accaggaaga agttgaatct ctgaatagac caataacagg ctctgaaatt 1080
gtggcaataa tcaatagttt acccaaccaa aagagtcagg gaccagatgg attcacagcc 1140
gaattctacc agaggtagca ggaggaaact gtaccattcc ttctgaaact attccaatca 1200
atagaaaaag aggggaatcct ccctaactca ttttatgagg ccagcatcat tctgatacca 1260
aagctgggca gagacacaac caaaaaagag aatttttagac caatatcctt gatgaacatt 1320
gatgcaaaaa tcctcaataa aatactggca aaccgaatcc agcagcacat caaaaagctt 1380
atccaccatg atcaagtggg ctctcatcct gggatgcaag gctggttcaa tatcgcgaaa 1440
tcaataaaat taatccagca tataaacaga gccagagaca aaaaccacat gattatctca 1500
atagatgcag aaaaagcctt tgacaaaatt caacaacctt tcatgctaaa aactctcaat 1560
aaattaggtg ttgatgggag gtatttcaaa ataataagag ctatctatga caaacccaca 1620
gccaatatca tactgaatgg gcaaaaactg gaagcattcc ctttgaaaac ggcacaaaga 1680
cagggatgcc ctctctcacc gctcctatcc aacatagtg tggaaagtct tggccagggca 1740
atcaggcagg agaaggaaat aaagggtatt caattaggaa aagagggaagt caaattgtcc 1800
ctgtttgcag acgacatgat tctttatcta gaaaacccca ctgctctcag ccaaaattctc 1860
cttaagtctg taagcaactt cagcaaaatc tcaggataca aaatcaatgt acaaaaaatca 1920
caagcattct tatcacacca caacagacaa acagagagcc aaatcatgag tgaactcccc 1980
ttcacaattg cttcaaaagag agtaaaatcc ctaggaaatc aacttacaag ggaatgtgaag 2040
gacctcttca aggagaacta caaacactg ctcaaggaaa taaaagagga cacaaacaaa 2100
tggagaagaa ttccatgctc atgggttagga agaattcaata tcgtgaaat ggcacatctg 2160
cccaaggtaa tttcacagatt caatgccatc cccatcaagc taccatgac ttcttccaca 2220
gaattggaaa aaactacttt aaagtccata tggaaaccaa aaagagcccg cattgccaaag 2280
tcaatcctaa gccaaaaaga caaagctgga ggcattcacac tacctgactt caaactatcc 2340

```

tacaaggcta	cagtaaccaa	aacagcatgg	tactggtacc	aaaacagaga	tatatagcaa	2400
tggaacagaa	cagagccctc	agaaaataatg	ccgcatatct	acaactatct	gatctttgac	2460
aaacctgaga	aaaacaagca	atgggggaaag	gattccctat	ttaataaaatg	gtgctgggaa	2520
aactggctag	ccatatgtag	aaagctgaaa	ctggatccct	tccttacacc	ttatacaaaa	2580
atcaattcaa	gatggattaa	agattttaa	gttagaccta	aaaccataaa	aacctctaga	2640
gaaaacctag	gcattaccat	tcaggacata	ggcgtggaca	aggacttcat	gtccaaaaca	2700
ccaaaagcaa	tggcaacaaa	agccaaaatt	gacaaaatgg	atctaattaa	actcaagagc	2760
ttctgcacag	caaaagaaac	taccatcaga	gtgaacaggc	aacctacaa	atggggagaa	2820
attttcgcaa	cctactcatc	tgacaaaagg	ctaataatcca	gaatctacaa	tgaactcaaa	2880
caaatttaca	agaaaaaaac	aaacaacccc	atcaaaaagt	gggcgaagga	catgaacaga	2940
cacttctcaa	aagaagacat	ttatgcagcc	aaaaaacaca	tgaagaaatg	ctcatcatca	3000
ctggccatca	gagaaatgca	aatcaaaacc	actatgagat	atcatctcac	accagttaga	3060
atggcaatca	ttaaaaagtc	aggaaaaca	aggaaaagct	gtatcactag	tctgagagct	3120
gtccatatgg	agaagctgaa	ggaggaggct	ctccaaaaag	ttgatccaaa	tactactggg	3180
atggagaggg	tcacaggcca	acccagttct	gtggttggtt	gggctgcttt	ggatgctaag	3240
aagctctcag	accccgagcg	cactgctgat	gagaatcaga	aaggcagcaa	acatctgcag	3300
gctattacag	tagtggttag	agaaagagga	agtagccttg	tcaaggctta	caaaaatgaa	3360
ggctcttatt	actatagaca	aatgattgga	gggtgttgta	attggggtaa	aagtgggctt	3420
gtcaagctc	ctgtgggcca	tgatatggat	tcttcatctg	aggaagaaca	cctggagtagc	3480
atccttgttg	agttttcctg	ggcaggtaaa	catatttttc	caaatgaaat	cttcataggg	3540
acccgaagtg	taaaacagat	aaaaggattt	gttctggttg	aagcagggct	ggaggagcac	3600
caagctctgc	ctatcatctt	tctctccctt	tacctgcagg	gaaacccccc	caagagtcc	3660
ttcagggcag	tcatctcacc	ttgttgctat	acagcatcgg	tgaatgcacc	tctgtgcgca	3720
cacactgacc	accagactgt	ggggctgcca	gtgataccaa	agaggccaca	tcaagagcta	3780
gagaacacgg	ggcccagaaa	ggctcttggt	tttctctcgt	aagacaacaa	tgaccaggat	3840
tgacccttgg	gtctccatga	gtccctgacc	ttcttagaat	gcacagtagt	gatctagagt	3900
catgaaattt	gaatattgga	aggaactggt	ctgtttatgt	acataatggg	ttatatatac	3960
acactcttac	ttttacatat	attctagaaa	acaaaccaag	tcagtgatat	caatacatgc	4020
agtgtgtcca	aaagaatgag	agaagagaga	ataggagtgt	ttaaactctc	ttaagggaaga	4080
ttttacagaa	gggactttag	caaatccttg	atgattttcc	tcgttcgaat	ttctctcttc	4140
aagtcaaaata	agtgagaata	ttttcagctg	ttacctgaac	atcggtggaa	agtcacaaaa	4200
ttgtcttgaa	ttatttttagt	gacatttttc	ttctagcttg	acagagatct	atataaagcc	4260
cagagacaag	ccacctgtct	gaataccttt	agtagtgata	atagtagtgg	tacacatgat	4320
aaatcactc	taaacactgg	agggctctct	tcccacagtt	tgccatgcag	aacatctaata	4380
tctatccatg	agggggccaaa	gccagtgaag	gcagaaaaag	agtattccac	accgcaggat	4440
cacagaaaga	actatgagga	ccgggccaga	gagttgggga	caaatagtgt	tcagccaggt	4500
tttagacctg	gcacagtttt	cccatgcaaa	accattctct	ttcagacttc	taccctttta	4560
gttctctggc	tcatttccgt	cctgaccagg	gtttctataa	acacagttcca	ttaaagaaaa	4620
ttcttaaatat	atgtccatga	atcccccttg	gtaaatgact	aaagtttcat	actttcatgg	4680
tgacagacct	ggctatattc	ctggaaaagt	cacatctagt	aaaactcact	actgtactcc	4740
aaggtagccaa	atagacatgg	aaactaaagta	aaagtgtgtt	gtttgtctatt	caagtgtagc	4800
ttccagccaa	gttgctgact	ctcagccact	ctggtataga	cattctggag	ctgccacact	4860
catggctgat	ggtgctcaca	tgctgaagaa	acacagtttg	catcat		4906

&lt;210&gt; 144

&lt;211&gt; 320

&lt;212&gt; DNA

<213> Homo sapiens

<400> 144

```

aaaagactga ctgaacttaa agaattccaa catctgggag tctggtaggc caaatcagat 60
ctgcagataa gactcaggag tggcttccag agagggtggca ggaatgtgta ctatcatagt 120
aacctgtagt agtttgacta gtagtagctc tgacttgagc aattggtggt actgaaatgg 180
gaaagattgg aggaggatta aactttgtaa agatattgaa ccaggtttca gatatactgt 240
ctggagctta aaagtcttaa gtagtataat aaattacaca gggaaagaat ctagagtagg 300
agccagggtgc agtggcacat                                     320

```

<210> 145

<211> 458

<212> DNA

<213> Homo sapiens

<400> 145

```

gatctagagg atccctaagg gcgagtcggg tacagtggca taataatagc ttactgcagc 60
ctccaactcc tgtgctcaag ggatcctccc acctcagctt cccaagtaat agggaccata 120
ggcatgtgcc actgcacctg gctcctactc tagattcttt cctgtgttaa tttattatac 180
tacttaagac ttttaagctc cagacagtat atctgaaacc tgggtcaata tctttacaaa 240
gttttaactct cctccaatct tteccatttc agtaccacca attgctcaag tcagagctac 300
tactagtcaa actactacag gttactatga tagtacacat tcctgccacc tctctggaag 360
ccactcctga gtcttatctg cagatctgat ttggcctacc agactcccag atgttggaaat 420
tctttaagtt cagtcagtct ttgcttctct aaaatctt                                     458

```

<210> 146

<211> 115

<212> DNA

<213> Homo sapiens

<400> 146

```

ggaactggtg actgtataag aagaggaaaa aagacctgtg caagcatggt agcatgctca 60
ttctcctccc catgtgatac cccatgttgc cttggaactc tacagaaagt ccctc      115

```

<210> 147

<211> 69

<212> DNA

<213> Homo sapiens

<400> 147

```

gttctatatg aaatagattt aatagatttg gatatttggg tgattttctc ttactatgt 60
tcattagtg                                     69

```

<210> 148

<211> 431  
 <212> DNA  
 <213> Homo sapiens

<400> 148  
 tagttctaata gaaatagaac tatgtcatta gttctatatg aaatagattt aatagatttg 60  
 gatatttggg tgattttctc ttactatgt tcattagtga attacattaa ttgattttct 120  
 aatgttgaat ccaacgtgta tgtttttttt ttttgagacg gagtctctct gctgtcgccc 180  
 aggcgtggagt gcagtggtgc tatctcggtc cactgcaacc tctgactcc taggttcaag 240  
 tgattctcct gcctcagcac tcctgagtag ctgggattcc aggcacacac cgccaccct 300  
 ggctaatttt tgtatttttg gtagagacgg ggtttcacca cgttggtcag gctgggtctcg 360  
 aactcctgac actcatgac cgcccgcatc agcctcccaa agtgcgtggga ttacaggcat 420  
 gaccaccagc a 431

<210> 149  
 <211> 266  
 <212> DNA  
 <213> Homo sapiens

<400> 149  
 tattttatatt tttattgggt accttaggat tctaatatgc ttacctcacc acaggttact 60  
 tttaaaggcc attacgccat ttaaaatacg gtataagaac ctaacaactg tatacttcca 120  
 ctttgtccat ctactttttg taccatgatt gtcacacatt ttacctatgt tataaatcct 180  
 tgcttgatca ctattatatt tgtttagtca attattgtat aaagatattt aaaaataag 240  
 aaaaatacat atctacctgc atagtc 266

<210> 150  
 <211> 300  
 <212> DNA  
 <213> Homo sapiens

<400> 150  
 gctcgaggaa gcattatgat acatttattg tggaagagag gggtagttta aacttgtttc 60  
 atccactgat gttcttattg tagctatgat atttcttaac ctgataaaac aatacttata 120  
 ggcaaacgtt tctcacttat gtatagatga aagtatgatt tatataacct tgccatacaa 180  
 tagggaccce ttaattactg aagtaattaa tgttttttga gatgtctata atatgttgca 240  
 gttggtgaag attttagaaa gttttatttc ggccgggtgt ggtcgttcat gcctgtaac 300

<210> 151  
 <211> 579  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> unsure

&lt;222&gt; (530)

&lt;223&gt; a, c, g or t

&lt;400&gt; 151

```

tctgcgtcgc tcacgctggg agctgttccct gttcagccat cttagctcca cccaccccat 60
gagagaatat tcttaaaacc aaatacgtca tagaagcatt atgatacatt tattgtggaa 120
gagaggggga gtttaaaactt gtttcatcca ctgagtgtctt tattgtagct atgatatttc 180
ttaatctgat aaaaacaatac ttataggcaa acgtttctca cttatgtata gatgaaagta 240
tgatttatat aaccttgcca tacaataggg acccattaat tactgaagta attaatgttt 300
tttagagatgt ctataaatatg ttgcagttgg tgaagatttt agaaaagtttt atttcggccg 360
gggtgtggtcg ttcatgcctg taatccagca cttggggagg ctgaggcggg tggatcacccg 420
gagggtctgga gatcaagatc agccggggcca acatgggtgg aaaccccatc tgggaactaaa 480
aatgacaaaa aaatttagcg ggggtggggg caggttgccct gtaatcccan gtactctcgg 540
aggctgaggc aggggaatgg ctggaaccgg ggaggcagg 579

```

&lt;210&gt; 152

&lt;211&gt; 882

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 152

```

ccccattatc agttggttct cagactctac cctagtgtcc agaacagtga tcaacacaga 60
gcaagtatatt aataagggtt tgttggcctg aagtgaacat cctctcaggg agggatagac 120
atcaagttag aggatgccag gcaaagggcc acccctagta acagctgctt gcatgtgcag 180
agggagtgcc cgaggaggtg ggagctctcg ggggtcacta gggggcgctg tgactatgac 240
tggatgccgt gttcttccctg caaggatgtg aggactcagt ctccaggcagg tgacaggagt 300
ggagcaatga acgccaagac acagctcctg ctctcctggc gcttacactc tggcggtgac 360
gctgcaggga tgcagatacg gtgacaaaac agtcgtgtcc ccaaactctt ccttatccct 420
gagaccgccc cagccatcct ctgctctgtg cccaccaca tgactcagaa ctttgatccc 480
tacctccatg tcttgaacag gcagtttccct ccaactcaga agtccccctc gccctggaaa 540
gctcctactt taccccggtg tccagctcac gaagctttct ctggctctcc agccaaaagt 600
cattgctgcc ctctccacgc actcctgctc tacacagctc cgctgcacgc ataagtccaa 660
gctagtgtgt gtctcccttt atccagacaa gactcctcag ggcgtgacc aggtcttagt 720
tatcctagcg tctcccaagc tgggcccctg ttgtgcgtac caggtatctg aaaaatggct 780
gctggaacaa aacagaggcc ggtcaagtgg aggagattaa ggttaataag tgacttctgt 840
gagaaagtct aacatcaggt gagtggcctg cacggtggtt ca 882

```

&lt;210&gt; 153

&lt;211&gt; 2075

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 153

```

atggagaatc tcaaagcatt cattgtatta agtgaagaa gccagacacc aaagactata 60
tataatttcc attttctatta catcctggga aagctaaatc tacaagaaca ggaacatat 120
cagtgaggcc caggggctgg aggaacatgg gtggagctag aggccattat ccttagcaag 180

```

```

ctgacacagg aacagaaaaa caaactaagt gggagccaaa taagaagaat atatggacac 240
aaagagggga acaacagaca ctggggactg cctgaggatg gagggcagga ggagggagag 300
gatcagaaaa ataactatca gagtgtgttg ggagaaccac gaggtcgtgg ggagagctgg 360
caggaagtgg ctgggcagac cttagaatgt agtaatggga aagctatgct ggcaatttgc 420
agcattcagc cgaattctgga tctggacctc cccctctggg gtctccatgg ggatcaggaa 480
gtcaagaaca gtgggtcttc ctcagtcctt ctggggctgg ggtcagcatt tgggcttgct 540
gtgttagata agcctgggga tggcagagat ggcgagatc ccaacaaaac atttgtgacc 600
tctcagcatt tccggagtga ggagtgttca cttggaggtc acggtgtaga acaacacccc 660
tccaccccat taactgttag gacatataaa acagaacaca gtgaagtgtc aatggttgaa 720
aaggacagta ccacattttc cctactagct ttccctgtca tctctaggag ggtccttcta 780
gggattttcca cttactggaa tcacttaggg atgcccgctg atgcagggac caccatctca 840
aacattgttg gttcccatcg agaagataag aatgagaaag gtgactctca gttccatcct 900
ctgggtcgtg aacccaaaact agggagctgaa atggctctca cagattccca aggagcagat 960
gtccctcaga gagtgtgact ttcttataat aactgtatca ggcagggttc aagtattctt 1020
ctctgctcaa cctcccaagt agctgggatt atagggtgtg gccaccacac ccggctaatt 1080
tttgattttt tagtagagac ggggtttcac catgttggcc aggctggtct cgaactcctg 1140
acctaagtg atccacccac ctgcggcctc caaactgctg gaattacagg ttgtagccac 1200
cgtgcagggc cactcacctg atgttagact ttctccacga agtcacttat taaccttaat 1260
ctcctccact tgaccggcct ctggttttgt ccagcagcca ttttccagat acctggtagc 1320
cacaagcagg gccacgctg ggagacgcta ggataactaa gacctgttca gcgccttgag 1380
gagtctgtgc tggataaaag gagacacaca ctagcttggga cttatgcgtg cagcggagct 1440
gtgtagaaga ggagtgcgtg gagagggcag caatgaactt tggctggaga gccagagaaa 1500
gttctgtgag ctggaaacac gggtaaagta ggagctttcc agggcggagg ggacttctga 1560
agtgaggagaa actgcctgtt caggacatgg aggtagggat caaagtctctg agtcatgtgg 1620
gtgggcacag agcagaggat ggctggggcg gtctcaggga taaggagaag tttggggacc 1680
agactgtttt gtcaccgtat ctgcatcctc gcagcctgca cgccagagtg taagcgccag 1740
gagagcagga gctgtgtctt ggcgttcatt gctccactcc tgtcacctgc ctgagactga 1800
gtcctccatc ccttgacgga agaacacggc atccagtcac agtcacagcg ccccttagtg 1860
acccccgaga gctcccacct cctcgggcac tccctctgca catgcaagca gctgttacta 1920
ggggtggccc tttgcctggc atcctctcac ttgatgtcta tccctccctg agaggatgtt 1980
cacttcaggc caacaaaccc ttattaaata cttgctctgt gttgatcact gttctggaca 2040
ctagggtaga gtctgagaa caactgataa tggggg 2075

```

<210> 154

<211> 38

<212> PRT

<213> Homo sapiens

<400> 154

Met Tyr Trp Ile Asn Leu Ala Phe Ile His Gln Ile Val Ser Asn Ser  
1 5 10 15

Ser Phe Pro Pro Ser Gln Thr Asn Glu Ala Lys Pro Asn Lys Cys Thr  
20 25 30

Leu Leu Leu Arg Ser Lys  
35



&lt;210&gt; 155

&lt;211&gt; 27

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 155

Met Gly Leu Ala Ala Thr Ala Thr Asn Ile Leu Ile Val Ser Asn Thr  
 1 5 10 15

Leu Leu Gly Ile Ile Arg Gln Lys Trp Arg Gly  
 20 25

&lt;210&gt; 156

&lt;211&gt; 42

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 156

Met Ala Cys Arg Gly Gly Thr Ile Asp Ile Thr Met Leu Lys Gly Trp  
 1 5 10 15

Pro Trp Leu Val Val Ser Lys Trp Arg Gly Glu Leu Val Leu Pro Trp  
 20 25 30

Leu Leu Trp Val Ser Pro Tyr Thr Ser Phe  
 35 40

&lt;210&gt; 157

&lt;211&gt; 77

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (75)

&lt;400&gt; 157

Met Arg Pro Thr Pro Cys Pro Met Trp Lys Ala Lys Ser Pro Pro Arg  
 1 5 10 15

Asp Trp Val Ser Ala Val Arg Glu Leu His Glu Leu Glu Gly Lys Gln  
 20 25 30

Thr Glu Arg Ser Gly His Trp Ala Val Ser Arg Leu Pro Ala Pro Arg

35

40

45

Thr Glu Gln Thr Val Thr Arg Thr Ala Asn Lys Ala Arg Arg Glu Ala  
 50 55 60

Leu Lys Gly Gly Gln Ser Gly Arg Ala Leu Xaa Leu Thr  
 65 70 75

&lt;210&gt; 158

&lt;211&gt; 39

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 158

Thr Leu Cys Cys Pro Gly Ala Ser Ala Thr Val Arg Ser Arg Ile Thr  
 1 5 10 15

Ala Ala Ser Asn Ser Trp Leu Gln Ala Leu Leu Leu Pro Arg Pro Pro  
 20 25 30

Glu Ala Leu Gly Leu Gln Ala  
 35

&lt;210&gt; 159

&lt;211&gt; 72

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 159

Met Ser Leu Arg Ala Val Val Glu Ala Ala Val Val Ala Val Val Gly  
 1 5 10 15

Ala Ala Val Val Ala Val Val Ala Ala Ala Val Val Ser Ala Ser Gly  
 20 25 30

Ala Ser Ser Ser Ala Gly Pro Val Ala Gly Tyr Val Ser Ala Gly Ala  
 35 40 45

Ala Val Val Gly Phe Ser Glu Cys Thr Lys His Pro Val Cys Phe Gln  
 50 55 60

Ser Phe Phe Ser Val Phe Ser Leu  
 65 70

&lt;210&gt; 160

<211> 75  
 <212> PRT  
 <213> Homo sapiens

<400> 160  
 Met Lys Phe Leu Ala Val Leu Val Leu Leu Gly Val Ser Ile Phe Leu  
 1 5 10 15  
 Val Ser Ala Gln Asn Pro Thr Thr Ala Ala Pro Ala Asp Thr Tyr Pro  
 20 25 30  
 Ala Thr Gly Pro Ala Asp Asp Glu Ala Pro Asp Ala Glu Thr Thr Ala  
 35 40 45  
 Ala Ala Thr Thr Ala Thr Thr Ala Ala Pro Thr Thr Ala Thr Thr Ala  
 50 55 60  
 Ala Ser Thr Thr Ala Arg Lys Thr Phe Gln Phe  
 65 70 75

<210> 161  
 <211> 27  
 <212> PRT  
 <213> Homo sapiens

<400> 161  
 Met Glu Arg Gln Ile Asn Ser Asn Asn Leu Gln Ser Asp Thr Ile Arg  
 1 5 10 15  
 Phe Ala Phe Trp Asp Gln Ala Trp Trp Leu Thr  
 20 25

<210> 162  
 <211> 103  
 <212> PRT  
 <213> Homo sapiens

<400> 162  
 Leu Ser Leu Phe Phe Cys Leu Phe Phe Leu Arg Arg Ser Leu Pro Leu  
 1 5 10 15  
 Leu Pro Arg Leu Glu Cys Ser Gly Ala Ile Ser Ala Pro Cys Asn Leu  
 20 25 30  
 Arg Leu Pro Gly Ser Asn Gly Ser Pro Ala Ser Ala Ser Ala Val Ala  
 35 40 45

Gly Ile Thr Gly Arg Asp Tyr Asn Ala Gln Leu Phe Phe Val Phe Leu  
 50 55 60

Val Glu Thr Gly Phe His Tyr Val Gly Gln Ala Gly Leu Lys Leu Leu  
 65 70 75 80

Thr Cys Asp Pro Pro Ala Ser Ala Ser Gln Cys Ala Gly Ile Thr Gly  
 85 90 95

Val Ser His His Ala Trp Pro  
 100

<210> 163

<211> 43

<212> PRT

<213> Homo sapiens

<400> 163

Met Ala Ser Phe Ser Asp Ser Phe Gly Asn Phe Phe Leu Ser Cys Met  
 1 5 10 15

Phe Leu Ser Ile Trp Ser Leu Asn Tyr Ile Cys Val Val Phe Phe Lys  
 20 25 30

Trp Ser Phe Ser Tyr Tyr Met Phe His Ser Lys  
 35 40

<210> 164

<211> 27

<212> PRT

<213> Homo sapiens

<400> 164

Met Asp Ile Lys Tyr Lys Thr Ser Phe Ser Tyr Ser Leu Met Phe Leu  
 1 5 10 15

Trp Leu Ser Phe Pro Leu Lys Gly Trp Phe Cys  
 20 25

<210> 165

<211> 85

<212> PRT

<213> Homo sapiens

&lt;400&gt; 165

```

Met Arg Pro Leu Cys Arg Thr Thr Lys Val Ile Leu Asn Leu Asn Leu
 1             5             10             15

Gly Val Asn Val Gly Thr Glu Gly Phe Lys Phe Glu Val His Cys Asn
      20             25             30

Ile Gln Gly Leu Pro Ala Tyr Ser Trp His Gly Trp Lys Asp Ala Thr
      35             40             45

Ser Ile Phe Thr Thr Leu Ile Lys Ala Ser Met Ser Gly Glu His Lys
      50             55             60

Met Gln Asn Asn Gly Cys Thr Thr Gly Asn Gly Gly Gln Cys Lys Gly
      65             70             75             80

Thr Pro Ser Phe Glu
      85

```

&lt;210&gt; 166

&lt;211&gt; 51

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 166

```

Met Ala Pro Ala Ser Arg Glu Gly His Ile Thr Arg Gln Asp Asp His
 1             5             10             15

Ser Tyr Gln Ser Ala Trp Leu Trp Asp Pro Leu Met Met Arg Cys Asn
      20             25             30

Pro Asp Leu Ile Ala Glu Ala Thr Gly Pro Lys Asp Cys Ser Phe Leu
      35             40             45

Leu Gly Cys
      50

```

&lt;210&gt; 167

&lt;211&gt; 144

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 167

```

Met Cys Gly Leu Ser Arg Gly Ile His Ser Leu Gly Arg Glu Thr Leu
 1             5             10             15

```

Lys Ala Gly Leu Val Pro Thr Ala Gly Asp Glu Leu Val Glu Gly Leu  
           20                          25                          30  
 Glu Arg His Ser Ser Gly Cys Thr Gly Gly Cys Gly Ala His Arg Ile  
           35                          40                          45  
 Gln Gln Arg Arg Thr Gly Ala Ala Arg Glu Gly Phe Trp Glu Glu Leu  
           50                          55                          60  
 Glu Thr Gln Thr Gly Gln Arg Leu Ala Gly Met Trp Trp Gly Thr Gly  
           65                          70                          75                          80  
 Gly Leu Ser Leu Val Glu Glu Thr Thr Thr Ala Lys Val Glu Asn Pro  
                           85                          90                          95  
 Trp Arg Arg Ser Leu Thr Trp Pro Glu Gln Arg Glu Glu Glu Gly Gln  
                           100                          105                          110  
 His Ser Glu Pro Gly Pro Gln Gly Thr Gly Ala Pro Trp Asn Leu Trp  
           115                          120                          125  
 Pro Lys Met Arg Asp Ala Thr Lys Gly Glu Phe Tyr Phe Asp Glu Glu  
           130                          135                          140

<210> 168  
 <211> 44  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> UNSURE  
 <222> (21)..(36)  
 <223> a, c, g or t

<400> 168  
 Met Trp Ala Ala Ile Cys Ile Ile Phe Val Ile Gln Lys Arg Asp Ile  
           1                          5                          10                          15  
 Lys Leu Lys Ile Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa  
           20                          25                          30  
 Xaa Xaa Xaa Xaa Ile His Leu Phe Arg Trp Glu Cys  
           35                          40

<210> 169  
 <211> 52  
 <212> PRT  
 <213> Homo sapiens

<400> 169  
 Met Asn Leu Phe Leu Cys Lys Ser Val Lys Tyr Ser Leu Asn Thr Cys  
           1                  5                  10                  15  
 Val Pro Gln Leu Gly Leu Glu Asn Ala Lys Thr Val Met Ser Ala Glu  
                   20                  25                  30  
 Phe Leu Cys Tyr Lys Val Ser Trp Val Arg His Pro Tyr Arg Ile Glu  
           35                  40                  45  
 Thr Thr Arg Lys  
           50

<210> 170  
 <211> 73  
 <212> PRT  
 <213> Homo sapiens

<400> 170  
 Met Cys Phe Ser Gln Ser Trp Gln Lys Gln Leu Thr Ile Leu Val Leu  
           1                  5                  10                  15  
 Thr Val Asn Arg Val Pro Lys Arg Val Tyr Arg Thr Gly Thr His Phe  
           20                  25                  30  
 Gly Asp Cys Cys Pro Lys Ala Leu Ser Phe Leu Phe Thr His Phe Gly  
           35                  40                  45  
 Val Leu Leu Trp Phe Leu Phe Gln Lys Ile Phe Leu Ser Phe Ile Ile  
           50                  55                  60  
 Leu Phe Leu Ser Ser Val Met Ser Ser  
           65                  70

<210> 171  
 <211> 58  
 <212> PRT  
 <213> Homo sapiens

<400> 171

Met Leu Arg Arg Tyr Met Pro Phe Ser Leu Ser Phe Ala His Lys Cys  
1 5 10 15

Thr Val Glu Phe Gly His Ser Ile Lys Glu Arg Ile Tyr Gly Leu Ser  
20 25 30

Pro Arg Ala Asn Lys Ile Leu Phe Ala Phe Gln Leu Pro Ile Ser Met  
35 40 45

Ser Phe His Phe Leu His Met Leu Leu Pro  
50 55

<210> 172

<211> 44

<212> PRT

<213> Homo sapiens

<220>

<221> UNSURE

<222> (2)

<220>

<221> UNSURE

<222> (4)..(5)

<400> 172

Met Xaa Ser Xaa Xaa Leu Asn Leu Gly Leu Ile Gly Ser Leu Thr Tyr  
1 5 10 15

Arg Leu Ser Trp Lys Met Ser His Val Tyr Leu Gly Arg Met Cys Ile  
20 25 30

Leu Leu Leu Leu Gly Thr Val Phe Cys Val Pro Trp  
35 40

<210> 173

<211> 24

<212> PRT

<213> Homo sapiens

<400> 173

Met Asp Leu Glu Ile Leu Thr Phe Ile Lys Glu Asn Ser Ser Leu Val  
1 5 10 15

Glu Thr Ser Leu Glu Arg Pro Lys  
20



<210> 174  
 <211> 69  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> UNSURE  
 <222> (26)

<220>  
 <221> UNSURE  
 <222> (68)

<400> 174  
 Met Pro Val Lys Leu Leu Ser Tyr Ser Leu Pro Val Gly Gly Ser Gln  
 1 5 10 15  
 Cys Glu Val Trp Ser Pro Gly Thr Arg Xaa Thr Trp Ala His Ser Leu  
 20 25 30  
 His Thr Gly Ala Gly Lys Gly Gln Arg Glu Leu Gln Thr Gly Lys Trp  
 35 40 45  
 Met Val Trp Gly Arg Ser Pro Ala Pro Val Thr Ser Cys Glu Ser Leu  
 50 55 60  
 Ser Gln Thr Xaa Gly  
 65

<210> 175  
 <211> 47  
 <212> PRT  
 <213> Homo sapiens

<400> 175  
 Met Leu Pro Asn Ile Asp Ile Asp Ser Leu Gly Glu Ile Leu Ser Lys  
 1 5 10 15  
 Tyr Lys Ile Leu His Val Gln Gln Leu Asn Val Ile Asn Glu Phe His  
 20 25 30  
 Ile Tyr Leu His Asp Ile Phe Glu Ile Lys Leu Ile Ile Leu Leu  
 35 40 45

<210> 176  
 <211> 66  
 <212> PRT  
 <213> Homo sapiens

<400> 176  
 Met Leu Thr Lys Ser Ser His Tyr Leu Phe His Gly Thr Val Glu Ile  
           1                  5                  10                  15  
 Arg His Pro Lys Val Ser Lys Thr Phe Lys Gln Gln Arg Leu Pro Met  
                   20                  25                  30  
 Gln Gly Ile His Trp Gly Lys Gly Gly Ala Gln Val Leu Pro Leu Leu  
                   35                  40                  45  
 Cys Asn Met Lys Pro Val Thr Lys Thr Ala Gly Glu Ser Leu Tyr Phe  
           50                  55                  60  
 Thr Leu  
       65

<210> 177  
 <211> 56  
 <212> PRT  
 <213> Homo sapiens

<400> 177  
 Phe Phe Phe Phe Leu Ala Arg Trp Gly Leu Ile Met Leu Pro Arg Leu  
           1                  5                  10                  15  
 Val Ser Asn Ser Trp Ala Gln Ala Ile Leu Leu Pro Arg Pro Pro Lys  
                   20                  25                  30  
 Met Leu Gly Phe Glu Ala Ala Ala Thr Thr Pro Ser Asp Lys Ser Leu  
           35                  40                  45  
 Phe Phe Lys Ile Ile His Tyr Pro  
           50                  55

<210> 178  
 <211> 42  
 <212> PRT  
 <213> Homo sapiens

<400> 178  
 Met Ile Ser Gly Asn Glu Glu Leu Asp Phe Ser Leu Glu Phe Ala Ser

1                    5                    10                    15  
 Thr Leu Leu Trp Gln Ile Ser Val Gly Ser Leu Ser Thr Leu Ser Ala  
                   20                    25                    30  
 Arg Gly Asn Leu Phe Tyr Gln Thr Gly Cys  
                   35                    40

<210> 179  
 <211> 31  
 <212> PRT  
 <213> Homo sapiens

<400> 179  
 Met Tyr Gln Tyr Phe Ile Thr His Gly Val Leu Lys Ile Gln Phe Lys  
   1                    5                    10                    15  
 Asn Thr Val Phe His Met Ser Tyr Lys Val Leu Glu Lys Lys Phe  
                   20                    25                    30

<210> 180  
 <211> 38  
 <212> PRT  
 <213> Homo sapiens

<400> 180  
 Met Leu Val Met Thr Ile Phe Thr Asn Thr Thr Ser Tyr His Tyr Pro  
   1                    5                    10                    15  
 Leu Lys Leu Thr Val Leu Glu Lys His Ser Asn Trp Asp Ser Ser Ile  
                   20                    25                    30  
 Lys Gly Asn Leu Val Phe  
                   35

<210> 181  
 <211> 20  
 <212> PRT  
 <213> Homo sapiens

<400> 181  
 Met Arg Pro Tyr Glu Arg Thr Pro Ser Asn Ser Pro Pro Gln Tyr Lys  
   1                    5                    10                    15  
 Pro Leu Ile Leu

20

&lt;210&gt; 182

&lt;211&gt; 68

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 182

Met Pro Lys Arg Leu Thr Gln Ile Lys Gly Pro Met Asn Asp Gly Cys  
 1 5 10 15

Tyr Cys Ser Tyr Cys Tyr Asp Phe Ala Thr Phe Leu Thr Tyr Pro Ser  
 20 25 30

Leu Asn Ile Leu Cys Ser Met Ala Ile Pro Arg Asp Gly Ile Lys Thr  
 35 40 45

Lys Glu Lys Leu Ser Phe Ser Thr Ser Asn Phe Ser Ser Ser Lys Ala  
 50 55 60

Tyr Val Gly Pro  
 65

&lt;210&gt; 183

&lt;211&gt; 115

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 183

Ser Phe Phe Phe Phe Phe Glu Thr Arg Ser Cys Phe Val Ala Arg  
 1 5 10 15

Ala Gly Glu Arg Trp Tyr Asp His Gly Ser Leu Ala Pro Leu Pro Pro  
 20 25 30

Arg Leu Lys Gln Ser Ser His Leu Ser Leu Ala Gly Thr Trp Asp Tyr  
 35 40 45

Arg Tyr Lys Cys His Cys Ala Gln Leu Ile Phe Val Phe Phe Cys Glu  
 50 55 60

Thr Gly Phe His His Val Ala Gln Ala Gly Leu Lys Phe Leu Gly Ser  
 65 70 75 80

Ser Asn Pro Pro Ala Ser Thr Ser Gln Ser Pro Gly Ile Thr Gly Met  
 85 90 95

Ser His His Thr Cys Ser Ser Phe Leu Leu Phe Ala Ile Gln His Leu  
 100 105 110

Leu Gln Tyr  
 115

<210> 184  
 <211> 53  
 <212> PRT  
 <213> Homo sapiens

<400> 184  
 Met Trp Met Cys Ile Leu Ser Gly Ser Met Ile Phe Pro Gly Pro Glu  
 1 5 10 15

Cys Asp Arg Ser Gly Pro Ala Ile Glu Leu Gln Ala His Arg Pro Ala  
 20 25 30

Ala Ala Leu Gly Cys Ile Ala Arg Leu Leu Ser Ser Cys Leu Val His  
 35 40 45

Met Met Pro Gly Leu  
 50

<210> 185  
 <211> 36  
 <212> PRT  
 <213> Homo sapiens

<400> 185  
 Met Lys Asn Lys Met Thr Leu Leu His Ile Lys Leu Leu Phe Ile Trp  
 1 5 10 15

Lys Asn Gln Cys Cys Phe Lys Val Ala Cys Ser Thr Ser Ser Leu Thr  
 20 25 30

Tyr Thr Lys Thr  
 35

<210> 186  
 <211> 23  
 <212> PRT  
 <213> Homo sapiens

&lt;400&gt; 186

Met Thr Thr Val Leu Ile Asn Val Gly Tyr Gln Lys Ile Pro Arg Ser  
 1 5 10 15

His Leu Trp Cys Thr Leu Asn  
 20

&lt;210&gt; 187

&lt;211&gt; 57

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 187

Met Gln Arg Asn Thr Pro Arg Thr Gly Glu Ser Glu Ser Met Ser Val  
 1 5 10 15

Thr Arg Ile Asn Ala Asp Glu Ala Glu Thr Arg Asn Ile Lys Phe Arg  
 20 25 30

Ile Ala Ser Ser Arg Arg Ile Lys Val Ile Phe Val Ile Lys Leu Lys  
 35 40 45

His Lys Gln Ile Glu His Cys Ile Val  
 50 55

&lt;210&gt; 188

&lt;211&gt; 23

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 188

Met Asn Cys Arg Arg Thr Arg Trp Arg Ser Val Val Tyr Ser Trp Asp  
 1 5 10 15

Leu Ser Leu Val Leu Ala Cys  
 20

&lt;210&gt; 189

&lt;211&gt; 40

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (9)..(10)

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (18)

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (26)

&lt;400&gt; 189

Met Met Thr Ala Phe Thr Ser Cys Xaa Xaa Thr Lys Tyr Lys Asn Gln  
 1 5 10 15

Lys Xaa Ile Asn Asn Gly Asp Phe Met Xaa His Lys Leu Ile Arg Tyr  
 20 25 30

Leu Met Leu Cys Leu Val Ala Val  
 35 40

&lt;210&gt; 190

&lt;211&gt; 70

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 190

Met Asn Asp Gln Thr Cys Gly Leu Pro Cys Ser Ala Val Ser Glu Arg  
 1 5 10 15

Leu Asp Pro Gln Pro Arg Thr Gly Pro Leu Ser Gly Met His Gln Arg  
 20 25 30

Arg Asn Trp Arg His Thr Gly Ala Gly Ala Ala Pro Gly Leu Arg Ala  
 35 40 45

Phe Pro Ala Leu Ser Val Tyr Pro Arg Met Glu Met Phe Thr Phe Leu  
 50 55 60

Phe Phe Thr Leu Asn Met  
 65 70

&lt;210&gt; 191

&lt;211&gt; 54

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 191

Met Leu Val Glu Cys Leu Val Asn Asn Glu Ser Tyr Ser Leu Trp Ser  
1 5 10 15

Gln Gly Ser His Lys Pro Thr Gly Gln Ile Leu Cys Ile Leu Val Ser  
20 25 30

Tyr Met Thr Ser Lys Phe Met Asn Leu Leu Asn Ser Phe His Thr Thr  
35 40 45

Gln Asp Ala Ser Phe Trp  
50

<210> 192

<211> 78

<212> PRT

<213> Homo sapiens

<400> 192

Gln Ala Gly Val Gln Trp Cys Asp Leu Gly Ser Leu Gln Pro Pro Pro  
1 5 10 15

Ser Gly Phe Lys Gln Phe Ser Tyr Leu Ser Leu Pro Ser Ser Trp Asp  
20 25 30

Tyr Arg Arg Val Pro Pro Arg Pro Ala Asn Phe Ala Ile Phe Ser Arg  
35 40 45

Asp Arg Val Ser Pro His Trp Leu Gly Trp Ser Arg Thr Pro Gly Leu  
50 55 60

Val Phe His Leu Pro Gln Pro Pro Lys Met Leu Gly Leu Gln  
65 70 75

<210> 193

<211> 125

<212> PRT

<213> Homo sapiens

<400> 193

Met Ser Asp Gly Arg Asp Leu Gly Arg Gln Pro Pro Leu Ile Leu His  
1 5 10 15

His Gln Pro Gly Leu Gly Thr Trp Leu Leu Phe Leu Ser Ala Val Ser  
20 25 30

Gly Gly Pro Trp Pro Thr His Lys Pro Phe Cys Gln His Leu Ala Phe



35                                      40                                      45  
 Gln Leu Thr Ser Thr Gln Gly Leu Cys Asp Phe Arg Arg Arg Gln Leu  
     50                                      55                                      60  
 Gly Arg Val Arg Ala Val Pro Gly Arg Ala Gln Thr Ser Ala Gln Thr  
     65                                      70                                      75                                      80  
 Ser Tyr Pro Pro Pro Thr Pro Arg Pro Arg Gly Phe Gln Ser Asn Gln  
                                     85                                      90                                      95  
 His His Gln Ala Pro Gly His Trp Lys Lys Asn Leu Cys Lys Glu Ala  
                                     100                                      105                                      110  
 Arg Gly His Leu Arg Lys Ser Arg Ser Pro Lys Leu Met  
                                     115                                      120                                      125

&lt;210&gt; 194

&lt;211&gt; 123

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (6)..(35)

&lt;400&gt; 194

Met Ala Glu His Thr Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa  
     1                                      5                                      10                                      15  
 Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa  
                                     20                                      25                                      30  
 Xaa Xaa Xaa Ile Gln Ser Ile Phe Phe Asp His Met Arg Ile Lys Ile  
                                     35                                      40                                      45  
 Gly Asn Ser His Arg Asn Ile Ser Glu Ile Ser Leu Asn Ile His Lys  
     50                                      55                                      60  
 Leu Asn Ser Thr Phe Gln Asp Gln Lys Glu Ile Lys Arg Glu Ile Arg  
     65                                      70                                      75                                      80  
 Lys Tyr Ile Glu Gln Asn Gln Asn Glu Asn Val Arg Ile Cys Gly Val  
                                     85                                      90                                      95  
 Thr Pro Lys Asn Val Cys Arg Lys Lys Gln His Lys Met Pro Asn Leu  
                                     100                                      105                                      110

Lys Lys Lys Asn Leu Asn Ser Val Thr Trp Ser  
115 120

```
<210> 195
<211> 33
<212> PRT
<213> Homo sapiens
```

```

<400> 195
Met Phe Val Leu Asn Thr Ile Leu Ile Asp Ile Tyr Cys Pro Leu His
  1                      5                      10                      15
Thr Cys Glu His Ile Phe Val Phe Glu Tyr Arg Tyr Leu Leu Asn Lys
  20                      25                      30

```

Ile

```
<210> 196
<211> 26
<212> PRT
<213> Homo sapiens
```

```
<400> 196
Met His Phe Gln Arg Arg Lys Asn Glu Asn Leu Ser Phe Lys Met Tyr
  1                      5                      10                      15
Ser Val Met Leu Asn Val Tyr Gly Leu Lys
      20                      25
```

```
<210> 197
<211> 31
<212> PRT
<213> Homo sapiens
```

```

<400> 197
Met Thr Ser Gln Pro Ile Pro Arg Thr Pro Ser Asn Thr Leu Gln Phe
  1                      5                      10                      15
Ala Ile Cys Val Glu Val Arg Arg Leu Val Ile His Lys Ile Thr
      20                      25                      30

```

<210> 198



<210> 201  
 <211> 16  
 <212> PRT  
 <213> Homo sapiens

<400> 201  
 Met Cys Lys Cys Gly Lys Val Pro Leu Glu Asn Leu Ile Arg Val Val  
 1 5 10 15

<210> 202  
 <211> 222  
 <212> PRT  
 <213> Homo sapiens

<400> 202  
 Met Glu Val Thr Pro Gly Glu Lys Ile Leu Arg Asn Thr Lys Glu Gln  
 1 5 10 15

Arg Asp Leu His Asn Arg Leu Arg Glu Ile Asp Glu Lys Leu Lys Met  
 20 25 30

Met Lys Glu Asn Val Leu Glu Ser Thr Ser Arg Leu Ser Glu Glu Gln  
 35 40 45

Leu Lys Cys Leu Leu Asp Glu Cys Ile Leu Lys Gln Lys Ser Ile Ile  
 50 55 60

Lys Leu Ser Ser Glu Arg Lys Lys Glu Asp Ile Glu Asp Val Thr Pro  
 65 70 75 80

Val Phe Pro Gln Leu Ser Arg Ser Ile Ile Ser Lys Leu Leu Asn Glu  
 85 90 95

Ser Glu Thr Lys Val Gln Lys Thr Glu Val Glu Asp Ala Asp Met Leu  
 100 105 110

Glu Ser Glu Glu Cys Glu Ala Ser Lys Gly Tyr Tyr Leu Thr Lys Ala  
 115 120 125

Leu Thr Gly His Asn Met Ser Glu Ala Leu Val Thr Glu Ala Glu Asn  
 130 135 140

Met Lys Cys Leu Gln Phe Ser Lys Asp Val Ile Ile Ser Asp Thr Lys  
 145 150 155 160

Asp Tyr Phe Met Ser Lys Thr Leu Gly Ile Gly Arg Leu Lys Arg Pro  
 165 170 175

Ser Phe Leu Asp Asp Pro Leu Tyr Gly Ile Ser Val Ser Leu Ser Ser  
 180 185 190

Glu Asp Gln His Leu Lys Leu Ser Ser Pro Glu Asn Thr Ile Ala Asp  
 195 200 205

Glu Gln Glu Thr Lys Asp Ala Ala Glu Glu Cys Lys Glu Pro  
 210 215 220

<210> 203

<211> 55

<212> PRT

<213> Homo sapiens

<400> 203

Met Val Cys Asp Phe Arg Asp Gln Ile Ile Asn Gly Ile Val Ala Ser  
 1 5 10 15

Ala Leu Phe Ser Leu Leu Cys His Ser Leu Trp Gly Lys Ser Ala Asp  
 20 25 30

Thr Arg Glu Asp Ala Gln Val Ala Leu Trp Arg Gly Pro Arg Gly Asp  
 35 40 45

Gly Leu Arg Leu Ser Pro Ala  
 50 55

<210> 204

<211> 62

<212> PRT

<213> Homo sapiens

<400> 204

Met Leu Pro Gly Ser Pro Ala Gly Glu Ala Val Ala Gly Trp Gly Val  
 1 5 10 15

Ala Pro Cys Gln Leu Pro Trp Ala Trp Asp Cys Arg Gln Pro Pro Pro  
 20 25 30

Gly Gly Gly Trp Arg Glu Ala Arg Val Arg Arg Val Arg Lys Ala Ser  
 35 40 45

Pro Ala Leu Gly Ser Gly Lys Gly Pro Glu Glu Pro Gly Arg  
50 55 60

<210> 205

<211> 330

<212> PRT

<213> Homo sapiens

<400> 205

Asn Cys His Arg Met Lys Pro Ala Leu Phe Ser Val Leu Cys Glu Ile  
1 5 10 15

Lys Glu Lys Thr Val Val Ser Ile Arg Gly Ile Gln Asp Glu Asp Pro  
20 25 30

Pro Asp Ala Gln Leu Leu Arg Leu Asp Asn Met Leu Leu Ala Glu Gly  
35 40 45

Val Cys Arg Pro Glu Lys Arg Gly Arg Gly Gly Ala Val Ala Arg Ala  
50 55 60

Gly Thr Ala Thr Pro Gly Gly Cys Pro Asn Asp Asn Ser Ile Glu His  
65 70 75 80

Ser Asp Tyr Arg Ala Lys Leu Ser Gln Ile Arg Gln Ile Tyr His Ser  
85 90 95

Glu Leu Glu Lys Tyr Glu Gln Ala Cys Arg Glu Phe Thr Thr His Val  
100 105 110

Thr Asn Leu Leu Gln Glu Gln Ser Arg Met Arg Pro Val Ser Pro Lys  
115 120 125

Glu Ile Glu Arg Met Val Gly Ala Ile His Gly Lys Phe Ser Ala Ile  
130 135 140

Gln Met Gln Leu Lys Gln Ser Thr Cys Glu Ala Val Met Thr Leu Arg  
145 150 155 160

Ser Arg Leu Leu Asp Ala Arg Arg Lys Arg Arg Asn Phe Ser Lys Gln  
165 170 175

Ala Thr Glu Val Leu Asn Glu Tyr Phe Tyr Ser His Leu Asn Asn Pro  
180 185 190

Tyr Pro Ser Glu Glu Ala Lys Glu Glu Leu Ala Arg Lys Gly Gly Leu  
195 200 205



Met Asn Xaa Xaa Xaa Thr Ala Met Leu Ile Ser Xaa Glu Gly Lys Asn  
 1 5 10 15

Xaa Gln Gly Asn Cys Lys Lys His Asn Tyr Arg Xaa Tyr Thr Ile Met  
 20 25 30

Met Ile Thr Ile His Ala Leu Gln Asn His Arg Tyr Ile Tyr Ile Leu  
 35 40 45

Leu Lys Ile His Gln Leu His Trp Ser Ser Thr Tyr Tyr Val Glu Arg  
 50 55 60

Lys Tyr Leu Arg Lys Phe Lys Leu  
 65 70

<210> 207

<211> 62

<212> PRT

<213> Homo sapiens

<400> 207

Met Tyr Ala Leu Ser Val Arg Ala Leu Ser Met Val Thr Ala Leu His  
 1 5 10 15

Asp Val Ser Gly His Tyr Ser Asp Gln Lys Lys Gly Gln Tyr Val Leu  
 20 25 30

Lys Gly Cys Glu Glu Val Ser Val Ser Trp Cys Thr Trp Thr Arg Glu  
 35 40 45

Pro Leu Ile Pro Phe Val Ala Ser Arg His Leu Val Thr Thr  
 50 55 60

<210> 208

<211> 34

<212> PRT

<213> Homo sapiens

<400> 208

Met Thr Gly Phe Leu Leu Cys Ser Ser Gln Leu Asn Phe Phe Phe Lys  
 1 5 10 15

Ile Leu Phe Cys Lys Ser Phe Leu Arg Ser Pro Cys Lys Pro Phe Ala  
 20 25 30

Gln Ser



&lt;210&gt; 209

&lt;211&gt; 93

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 209

Met Pro His Glu Gly Asp Leu Arg Leu Ser Leu Gly Arg Glu Ala  
 1 5 10 15

Lys Lys Arg Cys Gln Ala Ala His Gly Gln Arg Cys Ser Cys His Thr  
 20 25 30

Glu Phe Ser Val Leu Gly Ile Phe Val Thr Lys Ile Ala Glu Asp Ser  
 35 40 45

Gly Ser Tyr Val Ala Cys Thr Arg Gly Ala Pro Ala Pro Thr Val Pro  
 50 55 60

Ala Gly Pro Leu Lys Ser Ala Ser Leu Leu Ala Glu Pro Ser Val Ala  
 65 70 75 80

Pro Trp Trp Pro Arg Arg Ser Pro Asp Leu Ala Glu Ser  
 85 90

&lt;210&gt; 210

&lt;211&gt; 41

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 210

Phe Phe Ala Asp Thr Arg Ser His Ser Val Ala Ala Ala Gly Val Gln  
 1 5 10 15

Trp His Asp Tyr Ser Ser Leu Ala Pro Gln Thr Pro Gly Leu Lys Gln  
 20 25 30

Ser Ser Cys Leu Ser Pro Leu Ser Ser  
 35 40

&lt;210&gt; 211

&lt;211&gt; 99

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

$\langle 220 \rangle$ 

<221> UNSURE

<222> (63) .. (81)

<400> 211

Met Gln Pro Gly His Phe Arg Gly Gly Ser Val Cys Ala Ala Glu Glu  
1 5 10 15

Ser Arg Asp Lys Trp Glu Arg Gly Ser Gln Ala Lys Gly Pro Ala Cys  
20 25 30

Ala Lys Ala Gln Arg Leu Gln Ser Ala Cys Ala Ile Ser Pro Gly Gln  
35 40 45

Glu Thr His Leu Pro Glu Arg Arg Pro Glu Ala Val Thr Ala Xaa Xaa  
50 55 60

Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa
65					70					75					80

Xaa Arg Phe Leu Asn Pro Ala Met Ser Gly Glu Phe Gln Ile Ala Lys  
85 90 95

Ser Cys Cys

&lt;210&gt; 212

<211> 50

&lt;212&gt; PRT

<213> Homo sapiens

<400> 212

Met Ala Ala Thr Cys His Thr Val Ser Pro His Glu Gly Gly Gly Val  
1 5 10 15

Leu Ser Ala Val Ile Ile Tyr Thr Trp Leu Glu Asp Leu Gln Asp Arg  
20 25 30

Asn Phe Leu Lys Ile Pro Leu His Ser Asp Tyr Glu Ser Lys Ile Tyr  
35 40 45

Ser Leu  
50

<210> 213



Leu Leu Thr Ser Gly Asn Pro Pro Thr Ser Ala Ser Gln Ser Ala Gly  
 115 120 125

Ile Thr Gly Val Ser His His Thr Arg Pro Thr Lys Ser Phe Phe  
 130 135 140

<210> 215  
 <211> 65  
 <212> PRT  
 <213> Homo sapiens

<400> 215  
 Met Thr Thr Lys Ile Met Leu Gln Arg Asp Asn Ile Leu Ile Lys Phe  
 1 5 10 15

Cys Val Leu Leu Gln Tyr Leu Val Phe Lys Ile Ser Glu Leu Ser Leu  
 20 25 30

Gln His Phe Thr Asn Asn Lys Trp Leu Met Leu Glu Asn Asn Arg Asn  
 35 40 45

Asp Leu Phe Arg Pro His Val Asn Pro Cys Val Lys Asp Lys Gln Val  
 50 55 60

Phe  
 65

<210> 216  
 <211> 41  
 <212> PRT  
 <213> Homo sapiens

<400> 216  
 Met Lys Glu Gly Ser Leu Gly Arg Leu Val Tyr Lys Leu Gln Lys Leu  
 1 5 10 15

His Gln Pro His Pro Ser Ser Ser Pro Cys Ser Ser Asn Asn Ile Thr  
 20 25 30

Gly Phe Leu Cys Val Lys Thr Phe Phe  
 35 40

<210> 217  
 <211> 26  
 <212> PRT

<213> Homo sapiens

<220>

<221> UNSURE

<222> (5)

<220>

<221> UNSURE

<222> (11)..(16)

<400> 217

Met Pro Lys Arg Xaa Gln Ala Tyr Thr His Xaa Xaa Ala Xaa Xaa Xaa  
1 5 10 15

Ser Phe Asn Ser His His Gln Phe Val Arg  
20 25

<210> 218

<211> 38

<212> PRT

<213> Homo sapiens

<400> 218

Met Phe Val Ile His Val Tyr Val Lys Leu Lys Lys Tyr Thr His Pro  
1 5 10 15

Asn Leu Leu Gly Ile Pro Ser Leu Lys Ile Asn Leu Ile Tyr Ile His  
20 25 30

Arg Asn Ile Asn Thr Gly  
35

<210> 219

<211> 26

<212> PRT

<213> Homo sapiens

<400> 219

Met Val Cys Ser Ile Leu Arg Ala Thr Ser Phe Ala Met Ser Asn Thr  
1 5 10 15

Phe Glu Ile His Pro Tyr Phe Ser Val Tyr  
20 25

<210> 220

&lt;211&gt; 107

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 220

Phe Phe Phe Phe Leu Gly Arg Ser Phe Val Leu Leu Pro Arg Leu Glu

1

5

10

15

Cys Asn Gly Ala Val Trp Ala His Cys Asn Leu Cys Leu Pro Gly Ser

20

25

30

Ser Asp Ser Pro Ala Ser Ala Ser Ala Val Ala Gly Ile Thr Gly Ala

35

40

45

His His Gln Val Trp Leu Ile Phe Val Phe Leu Val Glu Met Gly Leu

50

55

60

Thr His Val Gly Gln Ala Gly Leu Lys Leu Leu Thr Ser Ser Asn Pro

65

70

75

80

Pro Thr Leu Ala Ser Gln Ser Ala Gly Ile Thr Gly Met Ser His His

85

90

95

Ala Gln Pro Glu Cys Thr Phe Ile Ala Ala Val

100

105

&lt;210&gt; 221

&lt;211&gt; 75

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 221

Met Ser Phe Val Leu Phe Val His Leu Phe Leu Ser Val Ala His Ser

1

5

10

15

Pro Arg Phe Leu Cys Leu Thr Phe Ile His Ser Ala Gly Leu Leu His

20

25

30

His Ser Pro Asn Pro Leu Asp Ala Cys Val Gly Pro Gly Val Asn Ser

35

40

45

Leu Ser Pro Met Val Pro Arg Glu Gly Leu Gly Ser Ser Ala Trp Ser

50

55

60

Gln Ser Leu Pro Thr Arg Tyr Cys Leu Lys Lys

65

70

75

<210> 222  
 <211> 53  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> UNSURE  
 <222> (25)

<220>  
 <221> UNSURE  
 <222> (28)..(50)

<400> 222  
 Met Tyr Tyr Thr Leu Asp Ile Glu Leu Asp Val Phe Pro Ile Ser Glu  
 1 5 10 15  
 His Leu Thr Tyr Thr Lys Ile Leu Xaa His Gly Xaa Xaa Xaa Xaa Xaa  
 20 25 30  
 Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa  
 35 40 45  
 Xaa Xaa Asn Val Lys  
 50

<210> 223  
 <211> 56  
 <212> PRT  
 <213> Homo sapiens

<400> 223  
 Met Gly Gly Gly Ala Ser Gln Arg Arg Trp Gln Glu Thr Arg Ala Cys  
 1 5 10 15  
 Gln Gly Cys Thr Leu Cys Phe Tyr Leu Arg Ala Ser Leu Asp Gly Lys  
 20 25 30  
 Thr Asp Gly Asp Cys Gly Leu Asn Ala Ser Asn Pro Leu Leu Lys Met  
 35 40 45  
 Thr Thr Gly Cys Ser Thr Ser Thr  
 50 55

<210> 224

&lt;211&gt; 28

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 224

Met Lys Arg Ile Asn Phe Val Gly Lys Ser Lys Trp Leu Leu Lys Ile

1

5

10

15

Gln Ile Lys Pro Val Lys Ile Lys Tyr Arg Gln Asn

20

25

&lt;210&gt; 225

&lt;211&gt; 42

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 225

Met Asn Ile Leu Gly Val Gly Ser Glu Cys Ile Arg Arg Phe Asn Lys

1

5

10

15

Ala Val Trp Gly Ile Asn Ile Lys Ser Lys Gly Phe Ile Leu Ile Leu

20

25

30

Arg Ser Val Lys Tyr Thr Pro Thr Leu Arg

35

40

&lt;210&gt; 226

&lt;211&gt; 59

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 226

Met Thr Trp Ser Gln Met Lys Gly His Phe Asp Pro Phe Phe Asp Phe

1

5

10

15

Asn Pro Lys Leu Ser Ala Asn Met Phe Tyr Phe Leu Ala Lys Val Ile

20

25

30

Leu Asp Ala Thr Trp His Tyr Ile Lys Asn Phe Asn Val Leu Glu Ser

35

40

45

Tyr Val Leu Asp Ser Lys Glu Leu Leu Trp Gly

50

55

&lt;210&gt; 227



&lt;211&gt; 43

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 227

Met Glu Ser Lys Asn Phe Pro Pro Pro Thr Pro Thr Val Phe Gln Cys

1 5 10 15

His Asn Tyr Lys Val Ser Leu Lys Tyr Tyr Leu Ile His Ser Asn Lys

20 25 30

Ser Lys Gly Phe Val Ser Ser Trp Phe Tyr Cys

35 40

&lt;210&gt; 228

&lt;211&gt; 127

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 228

Gly Leu Gln Ala Ala Thr Thr Leu Ser Gln Lys Ile Val Phe Lys

1 5 10 15

Gly Ser Phe Arg Leu Tyr Pro Glu Lys Val Ser Tyr Ala Ile Phe Phe

20 25 30

Ser Arg Gln Ser Leu Ala Leu Leu Pro Arg Leu Glu Cys Ser Gly Ala

35 40 45

Ile Ser Ala His Cys Asn Leu His Leu Pro Gly Ser Ser Asn Ser Pro

50 55 60

Ala Ser Ala Ser Ala Val Ala Gly Thr Val Gly Met Tyr His His Ala

65 70 75 80

Gln Leu Ile Phe Ile Phe Leu Val Glu Met Gly Phe Cys His Ile Gly

85 90 95

Gln Ala Gly Leu Lys Leu Leu Asn Ser Ser Asp Thr Pro Thr Leu Ala

100 105 110

Ser Gln Ser Ala Gly Ile Thr Gly Val Ser His His Thr Gly Pro

115 120 125

&lt;210&gt; 229

&lt;211&gt; 47





Val Thr Thr Asn Ala Leu Phe Trp Arg Ile Val Val Arg Trp Lys Lys  
 20 25 30

Asn

<210> 235  
 <211> 105  
 <212> PRT  
 <213> Homo sapiens

<400> 235  
 Asn Ala Gln Phe Phe Phe Cys Tyr Val Val Phe Glu Thr Gly Ser Arg  
 1 5 10 15

Ser Ala Ala Gln Ala Gly Val Gln Trp Gln Asp His Gly Leu Leu Gln  
 20 25 30

Pro Ala Pro Pro Gly Leu Lys Gln Phe Ser Leu Leu Ser Leu Gln Ser  
 35 40 45

Ser Trp Asp Tyr Arg Gln Val Pro Pro Arg Leu Thr Asn Phe Ala Ile  
 50 55 60

Phe Cys Arg Asp Gly Val Ser His Leu Ala Gln Ala Gly Leu Glu Leu  
 65 70 75 80

Leu Gly Ser Ser Lys Pro Pro Thr Ser Ala Ser Gln Ser Pro Arg Ile  
 85 90 95

Thr Gly Val Ser His Cys Pro Gln Pro  
 100 105

<210> 236  
 <211> 43  
 <212> PRT  
 <213> Homo sapiens

<400> 236  
 Met Phe Ile Glu Leu Leu Gln Gly Thr Trp Val Leu Lys Thr Arg Gln  
 1 5 10 15

Ile Cys Phe Tyr Asn His Ile Ser His Phe Gln Ser Leu Ser Lys Glu  
 20 25 30

Phe Val Val Gln Leu Leu Ala Ile Phe Tyr Cys

35

40

&lt;210&gt; 237

&lt;211&gt; 27

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 237

Met Thr Gly Val Phe Ser Glu Ile Ser Glu Arg Pro His Asn Leu Arg  
 1 5 10 15

Leu Asn Lys Glu Gly Ile Arg Ile Gly Asn Thr  
 20 25

&lt;210&gt; 238

&lt;211&gt; 98

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 238

Met Leu Ser Leu Asn Thr His Ala Val Gln Pro Gly Gly Pro Phe Ile  
 1 5 10 15

Phe Pro Leu Leu Asn Ser Ser Pro Ser Gln Val Leu Ser Ala Pro Leu  
 20 25 30

Phe Leu Cys Ile Pro Thr Thr Ser Gly Cys Asn Phe Thr Gly Trp Phe  
 35 40 45

Lys His Ser Leu Ser Cys Val Thr Tyr Pro Cys Thr Cys Pro Ser Leu  
 50 55 60

Leu Thr Ile Asn Ser Leu Trp Ala Asp Thr Val Ser Pro Thr Leu Gly  
 65 70 75 80

Pro His Arg Ala Pro Ala Gln Thr Leu Pro Ser Val Leu Leu Leu Thr  
 85 90 95

Ala Thr

&lt;210&gt; 239

&lt;211&gt; 59

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 239

Arg Lys Lys Ile Leu Lys Phe Leu Glu Thr Asn Glu Asn Gly Asn Thr  
 1 5 10 15

Thr Tyr Ala Asn Leu Gln Asp Thr Ala Lys Thr Val Leu Ala Arg Lys  
 20 25 30

Phe Ile Ala Lys Ser Ala Tyr Ile Lys Lys Val Glu Lys Leu Gln Ile  
 35 40 45

Asn Asn Leu Lys Met Asn Leu Lys Glu Leu Glu  
 50 55

&lt;210&gt; 240

&lt;211&gt; 53

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 240

Met Leu Arg Lys His Phe Asp Trp Arg Gln Arg Thr Lys Ser Tyr Ser  
 1 5 10 15

Ile Asn Ser Thr Ser Ser Val Leu Arg Ser Gln Lys Asp His Asp Leu  
 20 25 30

Val Tyr Ile His Ile Phe Leu Ile Lys Glu Glu Gly Tyr Tyr Ser Arg  
 35 40 45

Asn Leu Tyr Lys Ile  
 50

&lt;210&gt; 241

&lt;211&gt; 44

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 241

Met Gly Arg Lys Leu His Arg Thr Ser Leu Asn Gln Arg Met Glu Lys  
 1 5 10 15

Asp Thr Leu Arg Ile Gly Lys Val Glu Lys Ser Gln Arg Gly Met Leu  
 20 25 30

His Tyr Glu Ala Phe Gly Gln Trp Ala Thr Gln Gly  
 35 40

<210> 242  
 <211> 89  
 <212> PRT  
 <213> Homo sapiens

<400> 242  
 Met Leu Val Arg Ile Leu Ala Phe Thr Leu Pro Gln Val Thr Glu Gly  
 1 5 10 15  
 Arg Gly Asn Ser Gly Met Ile Thr Glu Glu Gln Leu Lys Arg Ser Lys  
 20 25 30  
 Pro Gln Arg Lys Cys Phe Leu Ala Ser Ile Ser Leu Tyr Val Lys Arg  
 35 40 45  
 Val Asn Ile Arg Ser His Asn Ile Glu His Leu Leu Pro Gly Ala Met  
 50 55 60  
 Leu Asn Ala Leu His Ala Leu Asn His Ser Phe Asn Lys His Leu Leu  
 65 70 75 80  
 Ser Thr Cys Tyr Val Gln Val Leu Phe  
 85

<210> 243  
 <211> 33  
 <212> PRT  
 <213> Homo sapiens

<400> 243  
 Met Cys Ser Leu Leu His Lys Ala Ser Gln Gln Ser Tyr Asn Val Gly  
 1 5 10 15  
 Ile Ile Thr Ala Ile Leu Tyr Leu Arg Thr Arg Arg Pro Arg Glu Val  
 20 25 30  
 Lys

<210> 244  
 <211> 38  
 <212> PRT  
 <213> Homo sapiens





<210> 247  
 <211> 35  
 <212> PRT  
 <213> Homo sapiens

<400> 247  
 Met Cys Leu Ala Thr Asn Leu Asn Leu Glu Tyr Tyr Leu Ile Tyr Pro  
     1                    5                    10                    15  
 Phe Leu Pro Ser Pro Arg Ile Lys Arg Asp Ala Val Ile Tyr Phe Leu  
                     20                    25                    30  
 Lys Ile Trp  
             35

<210> 248  
 <211> 94  
 <212> PRT  
 <213> Homo sapiens

<400> 248  
 Phe Arg Phe Ile Phe Phe Phe Leu Arg Gln Ser His Ser Val Ala  
     1                    5                    10                    15  
 Arg Leu Lys Cys Ser Asp Thr Val Ser Ala His Cys Asn Val Cys Leu  
                     20                    25                    30  
 Pro Asp Ala Ser Asp Ser Arg Ala Ser Ala Thr Glu Val Ala Gly Ile  
             35                    40                    45  
 Thr Gly Met His His His Thr Pro Leu Ile Phe Val Phe Leu Val Glu  
     50                    55                    60  
 Thr Glu Phe His His Val Gly Gln Ala Ala Asn Ser Ala Ala Gln Val  
     65                    70                    75                    80  
 Ile Leu Pro Pro Gln Leu Pro Lys Val Leu Ala Leu Gln Ala  
                     85                    90

<210> 249  
 <211> 17  
 <212> PRT  
 <213> Homo sapiens

<400> 249

Met Thr Glu Asp Ile Thr Tyr Thr Ile Ile Ile Thr Tyr Asn Ile Tyr  
1 5 10 15

Asn

<210> 250

<211> 69

<212> PRT

<213> Homo sapiens

<400> 250

Leu Leu Gly Ser Ser Asp Pro Pro Ala Ser Ala Ser Gln Val Ala Gly  
1 5 10 15

Thr Thr Gly Met Phe His His Thr Ser Leu Ile Leu Asn Ile Phe Cys  
20 25 30

His Tyr Val Pro Gln Pro Gly Leu Lys Leu Leu Ala Ser Thr Ser Pro  
35 40 45

Pro Ser Leu Thr Ser Gln Ser Val Arg Ile Met Gly Met Ser His Arg  
50 55 60

Ala Trp Pro Thr Phe  
65

<210> 251

<211> 43

<212> PRT

<213> Homo sapiens

<220>

<221> UNSURE

<222> (4)..(16)

<220>

<221> UNSURE

<222> (18)

<400> 251

Met Tyr Ile Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa  
1 5 10 15

Tyr Xaa Thr Ile Trp Leu Ala Ile Tyr Glu Pro Arg Pro Glu Gly Arg

20                      25                      30  
 Ala Asp Thr Lys Arg Arg Phe Leu Lys Met Ile  
                     35                      40  
  
 <210> 252  
 <211> 73  
 <212> PRT  
 <213> Homo sapiens  
  
 <400> 252  
 Met Glu Leu Leu Phe Ile Met Lys Ile Pro Lys Ser Ala Ala Glu Ile  
                     1                      5                      10                      15  
 Leu Lys Arg Glu Leu Leu Ile Thr Ile Asn Tyr Thr Ala Gln His Phe  
                     20                      25                      30  
 Pro Phe Phe Leu Phe Phe Leu Val Pro Met Leu Gly Arg Lys Pro Glu  
                     35                      40                      45  
 Tyr Glu Gln Glu Leu Phe Tyr Leu Leu Val Glu Lys Gly Gln Phe Ala  
                     50                      55                      60  
 Val Glu Arg Met Cys Val Ser Ser Val  
                     65                      70  
  
 <210> 253  
 <211> 58  
 <212> PRT  
 <213> Homo sapiens  
  
 <400> 253  
 Met Val Leu Ile Met Asp Asp Arg Phe Phe Phe Leu Leu Ala Lys Leu  
                     1                      5                      10                      15  
 Glu Val Gly Asn Pro Arg Leu Leu Phe Leu Pro Phe Pro Lys Phe Gln  
                     20                      25                      30  
 Ser Phe Thr Ser Leu Arg Asn Pro Arg Ile Ser Val Leu Lys Lys Leu  
                     35                      40                      45  
 Lys Pro Leu Thr Arg Ile Arg Gly Cys Ala  
                     50                      55  
  
 <210> 254



<210> 256  
 <211> 24  
 <212> PRT  
 <213> Homo sapiens

<400> 256  
 Met Tyr Asn Ser Ser Gly Thr His Asp Asn Ile Thr Leu Asn Thr Gly  
 1 5 10 15  
 Gly Leu Ser Ser His Ser Leu Pro  
 20

<210> 257  
 <211> 1031  
 <212> PRT  
 <213> Homo sapiens

<400> 257  
 Met Val Lys Gly Ser Ile Gln Gln Glu Glu Leu Thr Ile Leu Asn Ile  
 1 5 10 15  
 Tyr Ala Pro Asn Thr Gly Ala Pro Arg Phe Ile Lys Gln Val Leu Ser  
 20 25 30  
 Asp Leu Gln Arg Asp Leu Asp Ser His Thr Leu Ile Met Gly Asp Phe  
 35 40 45  
 Asn Thr Pro Leu Ser Thr Leu Asp Arg Ser Thr Arg Gln Lys Val Asn  
 50 55 60  
 Lys Asp Thr Gln Glu Leu Asn Ser Ala Leu His Gln Ala Asp Leu Ile  
 65 70 75 80  
 Asp Ile Tyr Arg Thr Leu His Pro Lys Ser Thr Glu Tyr Thr Phe Phe  
 85 90 95  
 Ser Ala Pro His His Thr Tyr Ser Lys Ile Asp His Ile Val Gly Ser  
 100 105 110  
 Lys Ala Leu Leu Ser Lys Cys Lys Arg Thr Glu Ile Ile Thr Asn Tyr  
 115 120 125  
 Leu Ser Asp His Ser Ala Ile Lys Leu Glu Leu Arg Ile Lys Asn Leu  
 130 135 140

Thr Gln Ser Cys Ser Thr Thr Trp Lys Leu Asn Asn Leu Leu Leu Asn  
 145 150 155 160

Asp Tyr Trp Val His Asn Glu Met Lys Ala Glu Ile Lys Met Phe Phe  
 165 170 175

Glu Thr Asn Glu Asn Lys Asp Thr Thr Tyr Gln Asn Leu Trp Asp Ala  
 180 185 190

Phe Lys Ala Val Cys Arg Gly Lys Phe Ile Ala Leu Asn Ala Tyr Lys  
 195 200 205

Arg Lys Gln Glu Arg Ser Lys Ile Asp Thr Leu Thr Ser Gln Leu Lys  
 210 215 220

Glu Leu Glu Lys Gln Glu Gln Thr His Ser Lys Ala Ser Arg Arg Gln  
 225 230 235 240

Glu Ile Thr Lys Ile Arg Ala Glu Leu Lys Glu Ile Glu Thr Gln Lys  
 245 250 255

Thr Leu Gln Lys Ile Asn Glu Ser Arg Ser Trp Phe Phe Glu Arg Ile  
 260 265 270

Asn Lys Ile Asp Arg Pro Leu Ala Arg Leu Ile Lys Lys Lys Arg Glu  
 275 280 285

Lys Asn Gln Ile Asp Thr Ile Lys Asn Asp Lys Gly Asp Ile Thr Thr  
 290 295 300

Asp Pro Thr Glu Ile Gln Thr Thr Ile Arg Glu Tyr Tyr Lys His Leu  
 305 310 315 320

Tyr Ala Asn Lys Leu Glu Asn Leu Glu Glu Met Asp Thr Phe Leu Asp  
 325 330 335

Thr Tyr Thr Leu Pro Arg Leu Asn Gln Glu Glu Val Glu Ser Leu Asn  
 340 345 350

Arg Pro Ile Thr Gly Ser Glu Ile Val Ala Ile Ile Asn Ser Leu Pro  
 355 360 365

Thr Lys Lys Ser Pro Gly Pro Asp Gly Phe Thr Ala Glu Phe Tyr Gln  
 370 375 380

Arg Tyr Lys Glu Glu Leu Val Pro Phe Leu Leu Lys Leu Phe Gln Ser  
 385 390 395 400

Ile Glu Lys Glu Gly Ile Leu Pro Asn Ser Phe Tyr Glu Ala Ser Ile  
 405 410 415  
 Ile Leu Ile Pro Lys Leu Gly Arg Asp Thr Thr Lys Lys Glu Asn Phe  
 420 425 430  
 Arg Pro Ile Ser Leu Met Asn Ile Asp Ala Lys Ile Leu Asn Lys Ile  
 435 440 445  
 Leu Ala Asn Arg Ile Gln Gln His Ile Lys Lys Leu Ile His His Asp  
 450 455 460  
 Gln Val Gly Phe Ile Pro Gly Met Gln Gly Trp Phe Asn Ile Arg Lys  
 465 470 475 480  
 Ser Ile Asn Val Ile Gln His Ile Asn Arg Ala Arg Asp Lys Asn His  
 485 490 495  
 Met Ile Ile Ser Ile Asp Ala Glu Lys Ala Phe Asp Lys Ile Gln Gln  
 500 505 510  
 Pro Phe Met Leu Lys Thr Leu Asn Lys Leu Gly Ile Asp Gly Thr Tyr  
 515 520 525  
 Phe Lys Ile Ile Arg Ala Ile Tyr Asp Lys Pro Thr Ala Asn Ile Ile  
 530 535 540  
 Leu Asn Gly Gln Lys Leu Glu Ala Phe Pro Leu Lys Thr Gly Thr Arg  
 545 550 555 560  
 Gln Gly Cys Pro Leu Ser Pro Leu Leu Phe Asn Ile Val Leu Glu Val  
 565 570 575  
 Leu Ala Arg Ala Ile Arg Gln Glu Lys Glu Ile Lys Gly Ile Gln Leu  
 580 585 590  
 Gly Lys Glu Glu Val Lys Leu Ser Leu Phe Ala Asp Asp Met Ile Leu  
 595 600 605  
 Tyr Leu Glu Asn Pro Ile Val Ser Ala Gln Asn Leu Leu Lys Leu Ile  
 610 615 620  
 Ser Asn Phe Ser Lys Val Ser Gly Tyr Lys Ile Asn Val Gln Lys Ser  
 625 630 635 640  
 Gln Ala Phe Leu Tyr Thr Asn Asn Arg Gln Thr Glu Ser Gln Ile Met  
 645 650 655

Ser Glu Leu Pro Phe Thr Ile Ala Ser Lys Arg Val Lys Tyr Leu Gly  
 660 665 670  
 Ile Gln Leu Thr Arg Asp Val Lys Asp Leu Phe Lys Glu Asn Tyr Lys  
 675 680 685  
 Pro Leu Leu Lys Glu Ile Lys Glu Asp Thr Asn Lys Trp Lys Asn Ile  
 690 695 700  
 Pro Cys Ser Trp Val Gly Arg Ile Asn Ile Val Lys Met Ala Ile Leu  
 705 710 715 720  
 Pro Lys Val Ile Tyr Arg Phe Asn Ala Ile Pro Ile Lys Leu Pro Met  
 725 730 735  
 Thr Phe Phe Thr Glu Leu Glu Lys Thr Thr Leu Lys Phe Ile Trp Asn  
 740 745 750  
 Gln Lys Arg Ala Arg Ile Ala Lys Ser Ile Leu Ser Gln Lys Asn Lys  
 755 760 765  
 Ala Gly Gly Ile Thr Leu Pro Asp Phe Lys Leu Tyr Tyr Lys Ala Thr  
 770 775 780  
 Val Thr Lys Thr Ala Trp Tyr Trp Tyr Gln Asn Arg Asp Ile Asp Gln  
 785 790 795 800  
 Trp Asn Arg Thr Glu Pro Ser Glu Ile Met Pro His Ile Tyr Asn Tyr  
 805 810 815  
 Leu Ile Phe Asp Lys Pro Glu Lys Asn Lys Gln Trp Gly Lys Asp Ser  
 820 825 830  
 Leu Phe Asn Lys Trp Cys Trp Glu Asn Trp Leu Ala Ile Cys Arg Lys  
 835 840 845  
 Leu Lys Leu Asp Pro Phe Leu Thr Pro Tyr Thr Lys Ile Asn Ser Arg  
 850 855 860  
 Trp Ile Lys Asp Leu Asn Val Arg Pro Lys Thr Ile Lys Thr Leu Glu  
 865 870 875 880  
 Glu Asn Leu Gly Ile Thr Ile Gln Asp Ile Gly Val Asp Lys Asp Phe  
 885 890 895  
 Met Ser Lys Thr Pro Lys Ala Met Ala Thr Lys Ala Lys Ile Asp Lys  
 900 905 910



Trp Asp Leu Ile Lys Leu Lys Ser Phe Cys Thr Ala Lys Glu Thr Thr  
 915 920 925

Ile Arg Val Asn Arg Gln Pro Thr Thr Trp Glu Lys Ile Phe Ala Thr  
 930 935 940

Tyr Ser Ser Asp Lys Gly Leu Ile Ser Arg Ile Tyr Asn Glu Leu Lys  
 945 950 955 960

Gln Ile Tyr Lys Lys Lys Thr Asn Asn Pro Ile Lys Lys Trp Ala Lys  
 965 970 975

Asp Met Asn Arg His Phe Ser Lys Glu Asp Ile Tyr Ala Ala Lys Lys  
 980 985 990

His Met Lys Lys Cys Ser Ser Ser Leu Ala Ile Arg Glu Met Gln Ile  
 995 1000 1005

Lys Thr Thr Met Arg Tyr His Leu Thr Pro Val Arg Met Ala Ile Ile  
 1010 1015 1020

Lys Lys Ser Gly Asn Asn Arg  
 1025 1030

<210> 258

<211> 24

<212> PRT

<213> Homo sapiens

<400> 258

Met Gly Lys Ile Gly Gly Gly Leu Asn Phe Val Lys Ile Leu Asn Gln  
 1 5 10 15

Val Ser Asp Ile Leu Ser Gly Ala  
 20

<210> 259

<211> 46

<212> PRT

<213> Homo sapiens

<400> 259

Arg Val Gly Tyr Ser Gly Ile Ile Ile Ala Tyr Cys Ser Leu Gln Leu  
 1 5 10 15

Leu Cys Ser Arg Asp Pro Pro Thr Ser Ala Ser Gln Val Ile Gly Thr

20 25 30  
 Ile Gly Met Cys His Cys Thr Trp Leu Leu Leu Ala Ile Leu  
 35 40 45

<210> 260  
 <211> 28  
 <212> PRT  
 <213> Homo sapiens

<400> 260  
 Met Gly Tyr His Met Gly Arg Arg Met Ser Met Leu Thr Cys Leu His  
 1 5 10 15

Arg Ser Phe Phe Leu Phe Leu Tyr Ser His Gln Phe  
 20 25

<210> 261  
 <211> 21  
 <212> PRT  
 <213> Homo sapiens

<400> 261  
 Met Asn Ile Val Lys Arg Lys Ser Pro Lys Tyr Pro Asn Leu Leu Asn  
 1 5 10 15

Leu Phe His Ile Glu  
 20

<210> 262  
 <211> 93  
 <212> PRT  
 <213> Homo sapiens

<400> 262  
 Tyr Val Phe Phe Phe Ala Asp Gly Val Ser Leu Leu Ser Pro Arg Leu  
 1 5 10 15

Glu Cys Ser Gly Ala Ile Ser Ala His Cys Asn Leu Cys Thr Pro Gly  
 20 25 30

Ser Ser Asp Ser Pro Ala Ser Ala Val Ala Gly Ile Pro Gly  
 35 40 45

Thr His Arg His Pro Trp Leu Ile Phe Val Phe Leu Val Glu Thr Gly

50

55

60

Phe His His Val Gly Gln Ala Gly Leu Glu Leu Leu Thr Leu Met Ile  
 65 70 75 80

Arg Pro His Gln Pro Pro Lys Val Leu Gly Leu Gln Ala  
 85 90

<210> 263  
 <211> 37  
 <212> PRT  
 <213> Homo sapiens

<400> 263  
 Met Cys Asp Asn His Gly Thr Lys Ser Arg Trp Thr Lys Trp Lys Tyr  
 1 5 10 15  
 Thr Val Val Arg Phe Leu Tyr Arg Ile Leu Asn Gly Val Met Ala Phe  
 20 25 30  
 Lys Ser Asn Leu Trp  
 35

<210> 264  
 <211> 31  
 <212> PRT  
 <213> Homo sapiens

<400> 264  
 Met Gly Pro Tyr Cys Met Ala Arg Leu Tyr Lys Ser Tyr Phe His Leu  
 1 5 10 15  
 Tyr Ile Ser Glu Lys Arg Leu Pro Ile Ser Ile Val Leu Ser Asp  
 20 25 30

<210> 265  
 <211> 64  
 <212> PRT  
 <213> Homo sapiens

<400> 265  
 Met Thr Gln Asn Phe Asp Pro Tyr Leu His Val Leu Asn Arg Gln Phe  
 1 5 10 15  
 Pro Pro Leu Gln Lys Ser Pro Pro Pro Trp Lys Ala Pro Thr Leu Pro

	20		25		30
Arg Val Pro Ala His Glu Ala Phe Ser Gly Ser Pro Ala Lys Val His					
35		40		45	
Cys Cys Pro Leu His Ala Leu Leu Leu Tyr Thr Ala Pro Leu His Ala					
50		55		60	

&lt;210&gt; 266

&lt;211&gt; 76

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 266

Gly Ser Ser Asp Ser Pro Ala Ser Thr Ser Gln Val Ala Gly Ile Ile					
1		5		10	15
Gly Val Cys His His Thr Arg Leu Ile Phe Val Phe Leu Val Glu Thr					
20		25		30	
Gly Phe His His Val Gly Gln Ala Gly Leu Glu Leu Leu Thr Ser Ser					
35		40		45	
Asp Pro Pro Thr Ser Ala Ser Gln Thr Ala Gly Ile Thr Gly Val Ser					
50		55		60	
His Arg Ala Gly Pro Leu Thr Ala Cys Ala Thr Phe					
65		70		75	